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THESIS

THE MILITARY HEALTH SERVICE SYSTEM:
BENEFICIARY SATISFACTION
AND AN OPTION FOR CHANGE

by

Amalie Ruth Fite

December 1990

Thesis Advisor Alice M. Crawford

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Five hundred forty-nine officers completed a questionnaire that was developed to address these issues. Trends noted were: (1) a slight rise in the level of dissatisfaction with the care provided by the current military health care benefit as time in service increases and (2) an increase in the use of civilian services in the military health service system, such as medical care for military beneficiaries at civilian treatment facilities and the use of commercial insurance plans for psychiatric treatment. The arguments presented in this thesis on this very sensitive issue will continue to be debated by both the Department of Defense and the legislative branch of the government.

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The Military Health Service System: Beneficiary Satisfaction and an Option for Change

by

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ABSTRACT

This thesis investigates several factors associated with the current military health benefit. These included: (1) beneficiary satisfaction with military as well as civilian medical treatment facilities, (2) the number of active duty military personnel who choose to use civilian facilities and the personal cost incurred in making that decision, (3) the number of active duty military personnel who would purchase civilian health insurance, (4) and the benefits of retaining the current military health benefit as opposed to instituting a civilian group health insurance plan in its place.

Five hundred forty-nine officers completed a questionnaire that was developed to address these issues. Trends noted were: (1) a slight rise in the level of dissatisfaction with the care provided by the current military health care benefit as time in service increases and (2) an increase in the use of civilian services in the military health service system, such as medical care for military beneficiaries at civilian treatment facilities and the use of commercial insurance plans for psychiatric treatment. The arguments presented in this thesis on this very sensitive issue will continue to be debated by both the Department of Defense and the legislative branch of the government.

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I. INTRODUCTION

A. SCOPE OF THE THESIS

This study examines beneficiary satisfaction with the current military health care benefit, the preference for military or civilian health care by active duty military personnel, the personal cost incurred in choosing civilian health care, and the benefits of retaining the current military health care benefit as opposed to instituting a civilian group health insurance plan in its place. This thesis will be of interest to those individuals within the Department of Defense (DoD) and Congressional Armed Forces Committees who are concerned with military medical care. It is a limited study based on a sample of active duty military personnel stationed at the Naval Postgraduate School in Monterey, California; however, research reviewed from a wide body of literature provides a broader base for analysis.

B. RESEARCH QUESTIONS

This thesis answers the following questions:

1. What percentage of active duty personnel use civilian medical facilities?

2. With what issues related to the current military health benefit are active duty personnel most satisfied? Least satisfied?

3. Why do active duty personnel choose to use civilian medical facilities?

4. What personal expense is incurred by active duty personnel when choosing to use civilian medical facilities?

5. Would active duty personnel pay for civilian medical insurance? If so, how much would they be willing to pay?

6. What are the benefits of eliminating the military health service system and replacing it with a civilian medical insurance plan?

7. What are the negative aspects of eliminating the military health service system and replacing it with a civilian medical insurance plan?

C. LIMITATIONS

The most substantial limitation to this research is the population from which the data were gathered. Because of funding and time constraints, a questionnaire targeted students at the Naval Postgraduate School. Students are officers, generally senior lieutenants and lieutenant commanders, who have been categorized as more career-oriented and motivated towards a life in the military than their peers. Because of their continued service and preference for military duty vice civilian employment, responses from this group may not be representative of the military as a whole.

II. BACKGROUND

Rising costs, high beneficiary dissatisfaction, and inadequate readiness for war have stirred widespread interest in reforming the military's system of health care. Before delving into these specific areas, it is wise to have a clearer understanding of the scope of the matter. This chapter describes the size, purpose, cost, and suggested reforms of the current military health care benefit.

A. SIZE

The Department of Defense now spends over $9 billion a year on medical services. Over 500 military treatment facilities, including 168 hospitals and about 350 clinics located throughout the world, provide care directly to the 2.2 million men and women on active duty and to about 8 million non-active beneficiaries. Hospitals range is size from a three-bed hospital in Crete to six facilities with more than 500 beds. Also included are18 medical teaching centers. These facilities are staffed by a total health professional force of over 43,000 active duty military officer personnel including more than 13,000 physicians, 5,000 dentists, 13,000 nurses and nurse practitioners, veterinarians, optometrists, podiatrists, psychologists, and physicians' assistants. The enlisted and civilian medical personnel force includes over 163,000 men and women.

B. PURPOSE

The purpose of the military health care system (MHSS) is to provide medical support to the United States' combat forces during war and to provide peacetime health care for active duty personnel and their dependents. In addition, the MHSS provides a quality health benefit to retirees and the dependents of retired and deceased members of the Armed Forces. Peacetime health care for DoD beneficiaries is considered a benefit but is also closely associated with military readiness. Quality health care for active duty members is necessary to ensure the readiness of the troops. Providing health care to other beneficiaries ensures training opportunities for the professional medical staff. In addition, health care for dependents of active duty members is a form of compensation to active duty personnel, a benefit commonly provided by employers. Health care for retirees and their dependents is commonly understood to be a key part of the total retirement package offered to career personnel.

C. COSTS

When care is not available or accessible in a military hospital, it is purchased in the private sector. For dependents and retirees, the cost of this care is financed through payments shared by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) and the beneficiary. For active duty members, it is purchased by the service under a supplemental payment program.

Of the over $9 billion a year spent on military medical services, roughly 33 percent was used for Army medical operations for fiscal year1987 (the year most data were available), while the Navy and the Air Force accounted for 20 percent and 24 percent, respectively. A large portion of the remaining 23 percent was used for CHAMPUS expenditures. For MHSS's, the majority of the budget is split almost evenly between health care operations/maintenance and personnel costs.

MHSS costs have increased slightly faster than national health expenditures throughout the mid-1980's. Costs for providing care to MHSS beneficiaries totalled $6.1 billion in fiscal year 1987 and increased at an average of 9.2 percent between 1983 and 1987. If costs continue to grow at this rate, they will reach $19.2 billion by 1995. The program is currently growing by about $1 billion a year.

In 1986, the services estimated that it cost $1.9 billion to treat active duty personnel in military treatment facilities, $3.1 billion to treat non- active duty personnel in military treatment facilities and $1.7 billion to treat non-active duty personnel through CHAMPUS. These costs do not include expenses related to wartime readiness and training, recruitment, procurement, base operations, and the Uniformed Services University of Health Science.

In 1988, the services developed figures for the estimated annual value of the military medical benefit [Ref. 1]. They are presented in Table I. The Department of Defense admits that the methods for deriving the figures for the services are questionable, and that they may or may not include expenditures for items that are not related

to health care. The issue of valuing the military medical benefit is further complicated by incomplete data and the variety of approaches than are used. Each service uses different methods to value the health benefits as a compensation item; therefore, these estimates cannot be used reliably to determine the cost of the military health benefit.

TABLE I

ESTIMATED ANNUAL VALUE OF BENEFIT, 1988

Type	Single Coverage	Family Coverage
Army	$884	$1918
Navy	$828	$2232
Air Force	$732	$1440
FEHB Premium for High Option BC/BS	$2252	$4754
Average Value of Basic Benefits Plan	$1320	$3240

The fiscal year 1987 Defense Authorization Act enacted on November 14, 1986 included a requirement to phase in a system of health care enrollment in order to better determine the number and category of medical care beneficiaries. The system was to be fully implemented by October 1, 1990. However, DoD has made little progress toward meeting the legislators' requirement. Once this information is accumulated and made available to researchers, more realistic estimates of the cost of the health care benefit can be made.

Legislators and DoD officials recognize that military medical costs are rising rapidly. The shrinking dollars available for maintaining the overall DoD force structure and military capability in the 1990's have made the increasing overhead and support costs for medical programs visible and vulnerable targets for budget cuts. Military medical costs now represent almost five percent of all DoD outlays. Unlike Medicare and many commercial health insurers, which are seeking to shift some of the cost growth burden to subscribers, most DoD officials argue against any plan that would change the current military health benefit. The benefit is viewed as an important part of the overall military compensation system, and one of the biggest factors for maintaining good recruiting and retention levels in the armed services [Ref. 2].

D. SUGGESTIONS FOR REFORM

The cost to DoD of supplying dependents and retirees with inexpensive medical care, as well as concern over the timeliness of service, has prompted many suggestions for reforming the military health care system. One widely discussed approach would charge fees to non-active duty personnel for their out-patient visits to military hospitals and clinics [Ref. 3]. It has long been thought that since such visits are free, they may encourage heavy use of out-patient medical services. Such fees would not only raise revenue but would also cut down on the long waiting lines that burden many military medical facilities, and possibly reduce spending for the Civilian Health and Medical Program of the

Uniformed Services (CHAMPUS). Another approach to reducing spending would change the law so that DoD could collect from private health insurance companies when their policyholders receive direct care [Ref. 4]. Private insurers cover many patients in military hospitals and clinics, but generally do not reimburse the government for its medical services.

Both of these proposals are quite specific and could clearly save money. However, this thesis investigates another approach to holding down costs and improving service. This thesis explores the feasibility of instituting a civilian medical insurance plan designed to replace the current military health benefit. Specific areas that are explored are the desire of military personnel for civilian vice military medical health care, and the benefits and opposition to instituting such a civilian health insurance plan for active duty military personnel.

III. LITERATURE REVIEW

Since the 1940's, there have been over 30 studies of the military health care system. Several analyses conducted within the last ten years have addressed the cost of the military health benefit and suggested various cost containment strategies. Other studies have focused on readiness issues for wartime contingencies, the Military Health Services System's (MHSS) responsibility during peacetime, the level of care provided to dependents, and beneficiary satisfaction. The following summaries condense the findings and recommendations of the most recent studies in this area.

In one study conducted in October 1978, Coopers and Lybrand, under contract to the Office of the Assistant Secretary of Defense (Health Affairs), analyzed the military health benefit to determine if there were ways to improve the delivery of care and reduce costs [Ref. 5]. As alternatives to the MHSS, the authors compared various Federal Employee Health Benefits Program plans and premiums to hypothetical Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) options.

The research showed that user rates for in-patient services in the direct care system were substantially higher than those found in comparable civilian populations, and resulted in higher costs. To reduce these high in-patient costs, the report recommended that use reduction incentives, such as pre-admission screening and retrospective reviews, be built into the military health benefit.

Specifically, the researchers recommended that a panel of physicians should evaluate the medical tests performed prior to admission of the patient to ensure that in-patient admission was the proper therapy, and then review the medical procedures performed after release to again ensure that in-patient admission had been the best course of treatment. By careful analysis of the cases and treatments used, the physicians could determine the most effective and least costly therapy. To date, the recommendation to institute these procedures in military treatment facilities (MTF) has not been adopted system-wide.

A year later, a major review of the military health benefit by Donald B. Rice for the Secretary of Defense was published in a February 1979 report that reviewed the management of the MHSS in terms of military readiness for war and its peacetime responsibilities [Ref. 6]. The report recognized that the mission of the MHSS is to provide care to active duty personnel in both peacetime and wartime and to provide a health benefit to active duty dependents, retirees, their dependents, and survivors during peacetime. The study found that Department of Defense (DoD) beneficiaries perceived that they were not provided the level of access to health care that they had been led to expect, and they also felt that the quality of their health benefit was declining. In order to alleviate high demand at MTFs while improving the dependent health care benefit, several recommendations to the CHAMPUS program were made:

1. Limit the maximum out-of-pocket costs per year to $1000 per individual and $2000 per family. At that time, there was no cap on expenses paid through the CHAMPUS system, and families were required to pay a certain percentage of the costs regardless of how catastrophic the illness may be.

2. Require copayments for MTF out-patient visits for non-active duty beneficiaries. Currently no fee is charged for health care at MTFs. The study encouraged a required copayment for reduced use.

3. Cover well-baby care and immunizations up to two years of age under CHAMPUS.

4. Extend CHAMPUS coverage to all eligible CHAMPUS beneficiaries 65 or older, with Medicare designated as primary payor.

5. Offer limited dental care benefits to active duty dependents.

6. Increase provider participation in CHAMPUS.

7. Provide the option to CHAMPUS eligibles to enroll in health care plans, and permit MTF commanders to contract with civilian providers for certain types of care.

Many of the recommendations of this report have been implemented. Immunizations and well-baby examinations for children up to two years of age were added to CHAMPUS in 1980. Dental care was added to CHAMPUS for dependents of active duty personnel in 1987. Starting in fiscal year 1988, CHAMPUS families have received catastrophic protection. Finally, the CHAMPUS Reform Initiative is allowing enrollment in health care plans as part of a demonstration project [Ref. 7].

A second effort in 1979, emphasized the need to define the military health benefit and its limits, institutionalize that benefit into law, and develop and implement mechanisms for the provision of that benefit. The report revealed a lack of clearly stated coverage limitations, which resulted in beneficiary frustration [Ref. 3]. Recommendations included:

1. CHAMPUS coverage of well-baby exams and immunizations up to two years of age.

2. Implementation of a $3 out-patient copayment at military treatment facilities for non-active duty beneficiaries in an effort to lower use.

3. Initiation of dental coverage for active duty dependents, with a surcharge to control use levels.

The first and third recommendations have been implemented. A user fee for MTF out-patient care has not been adopted.

In 1983, the President commissioned a DoD study to identify opportunities for increased efficiency and reduced costs, determine areas where managerial accountability could be enhanced and administrative controls improved, and suggest short and long term managerial operating improvements. The study found that CHAMPUS and the direct care system were not satisfactorily coordinated for efficiency [Ref. 8]. One of the recommendations from the report was that DoD should introduce more effective cost containment measures in the military health care system by requiring patients to pay a greater portion of health care costs. Specifically, this would include charging for out-patient visits at direct care facilities, increasing the deductible for out-patient visits

covered by CHAMPUS, and increasing co-payments for in-patient visits at direct care facilities and in-patient visits covered under CHAMPUS. DoD did not implement the recommended cost containment initiatives because it was believed that the advantages attributed to the implementation of these recommendations could not be substantiated without more explicit analysis.

A March 1984 report was prepared by the Congressional Budget Office to discuss options for changing the military medical program to reduce costs and improve service. The report states that CHAMPUS eligibles (non-active duty personnel) accounted for 70 percent of out-patient visits and 60 percent of in-patient days at MTFs [Ref. 4]. A correlation was noted between this predominant use of MTFs by non-active duty personnel and the rising cost of the military health care benefit. A number of options for reducing costs by limiting the use of MTFs by non-active duty personnel were mentioned:

1. Charging beneficiaries for out-patient visits at MTFs.

2. Coordinating benefits with private insurers when beneficiaries with other coverage use MTFs.

3. Using a system similar to Medicare's system to budget for costs at MTFs.

4. Closing enrollment or limiting access to MTFs for non-active duty beneficiaries.

Coordination of benefits has been adopted and the Medicare budgeting method is being implemented.

Another congressionally mandated report was issued by the Rand Corporation in 1984 [Ref. 9]. The report detailed the feasibility and desirability of a health enrollment system under which MTFs would be responsible for the health care of the active duty individuals and those CHAMPUS eligible beneficiaries within their geographical area of treatment until a target enrollment population was reached. Possible benefits if such a plan was implemented include reducing military health care costs, increasing the quality of care, and improving the ability to plan for medical costs. A number of recommendations were made to reorganize the MHSS to allow for a health enrollment system. A major recommendation included the collec- tion of copayments for care received at the MTF. To date, none of the report's recommendations have been implemented.

In January 1988, the National Security Divison of the Congressional Budget Office published a study of the MHSS [Ref. 7]. Three main problems were addressed: the rising cost of the MHSS, beneficiary dissatisfaction, and inadequate readiness for war. The report made no specific recommendations but stated that:

1. DoD beneficiaries have no incentive to use health care services prudently, since out-of-pocket costs are low.

2. Current funds allocation methodology provides no incentives to reduce per capita use of medical services. There is little cost-consciousness at the MTF level.

3. Attempts to further control the use of the health care system might create greater dissatisfaction.

4. Military hospitals are inefficently used. Only 60 percent of available bed space was operational in 1985. Personnel shortages and poor facility design also create problems.

This report provided no recommendations; therefore, no action was taken.

In April 1988, a major review of the Federal Employee Health Benefit Program (FEHBP) was issued under contract to the U.S. Office of Personnel Management [Ref. 10]. This report reviewed the structure of the FEHBP, the content of the enabling legislation, the administration of the program, and the reaction of enrollees and carriers to these and other features of the FEHBP. The study noted that by allowing high risk, high cost beneficiaries to become concentrated in a few plans that offer comprehensive benefits, the costs of those plans were driven up dramatically. Because the costs of these plans were now higher than the costs of other plans, they could no longer compete within the FEHBP and when they voluntarily withdrew, their beneficiaries were forced to subscribe to a new plan.

Another of the study's findings concerned Medicare-eligible annuitants in FEHBP plans. Carriers charge the same premiums for these enrollees, even though the plan pays only for reimbursable charges in excess of Medicare coverage. The researchers felt that since the FEHBP plans were paying less of a share of the medical benefit for Medicare-eligible annuitants, the cost of the premiums should be lower for that group. The study also found that the FEHBP lagged behind CHAMPUS and Medicare (as well as many large

private employers) in adopting cost containment measures. Recommendations included:

1. Developing a separate plan for Medicare-eligible annuitants, designed specifically for their needs.

2. Defining a minimum level of benefits to assure quality of care.

3. Requiring all carriers to implement a standard set of effective cost containment measures, including a pre-admission review program and case management for large claims.

Private sector employee health care benefits have been reviewed in a number of studies, papers, and articles. Individual employers often hire benefits consultants to study their benefit plans and make recommendations. In such cases, these studies review only the company in question and the results are usually proprietary. In terms of general reviews of employee benefits, however, most researchers agree on the following:

1. Beneficiary cost-sharing is on the rise, with employees being required to contribute more towards premiums and pay more through deductibles and coinsurance.

2. Alternative delivery systems emphasizing case management techniques and use reviews (e.g., pre-admission screening) have gained wide acceptance, with some employers eliminating traditional fee-for-service packages in favor of Health Maintenance Organizations. However, the effectiveness of these measures varies greatly as measured by the inconsistent use of them within the health care community.

3. Private companies could negotiate discounts with Preferred Provider Organizations in an effort to slow the rate of cost growth.[Ref. 1:p. 4-23]

One outcome of these recommendations to employees is the advent of allowing employees to choose the benefits they want. In order to offer attractive benefits to employees without paying for benefits that some workers will never use, some large private employers are beginning to develop menu-style benefit packages. With these packages, workers are free to choose from a wide assortment of benefits, each having its own cost in the form of payroll deductions.

As noted earlier, the Department of Defense has been studying the military health care system for almost 50 years. The primary concerns have been cost containment, improved delivery of health care for dependents, medical readiness in time of war, peacetime responsibilities, and beneficiary satisfaction. Some of the recommendations provided in these studies have been implemented, particularly in the area of dependent health care. However, the majority of recommendations for cost containment measures have not been instituted primarily because legislators and the Department of Defense feel that those changes would be perceived as a loss of a guaranteed benefit and thus impact unfavorably on recruitment and retention. Problems in this area have been identified and solutions suggested. Action will need to be taken if the escalating cost of the military health benefit is to be controlled.

Table II outlines the studies noted and summarizes the findings and recommendations.

TABLE II

A SUMMARY OF THE STUDIES REVIEWED

STUDY	FINDINGS	RECOMMENDATIONS
Coopers and Lybrand (October 1978)	Use of health services by active duty military significantly exceeds that of a comparable civilian population.	Use pre- and post-admission reviews to reduce costs.
Rice Report (February 1979)	MHSS beneficiaries perceive a lower level of access and quality of care than is available to the civilian population.	Limit out-of-pocket medical costs, include dental care and well baby exams in CHAMPUS.
Schumacker Report (1979)	The health benefit and its limits need to be defined; a user fee would reduce use.	Charge $3 for each in-patient visit, define and qualify the MHSS benefit.
Grace Report (1983)	MHSS costs have risen significantly; MHSS hospitals are seriously underused.	Cease CHAMPUS benefits in areas where beneficiaries have access to MHSS.
Congressional Budget Office (March 1984)	Non-active duty beneficiaries account for 70 percent of the out-patient and 60 percent of the in-patient days at MTFs.	No recommendations made.
Rand Corporation (June 1984)	A Health Enrollment System is not feasible in the current MHSS.	Implement a demonstration project to test the Health Enrollment System.
Congressional Budget Office (January 1988)	No incentives exist to reduce MHSS costs.	No recommendations made.
U.S. Office of Personnel Management (April 1988)	High cost beneficiaries are concentrated in a few health insurance plans.	Develop a separate plan for Medicare eligible annuitants.

IV. METHODOLOGY AND FINDINGS FROM QUESTIONNAIRES

This thesis investigates several factors associated with the current military health benefit. These include: (1) beneficiary satisfaction with military as well as civilian medical treatment facilities, (2) the number of active duty military personnel who choose to use civilian facilities and the personal cost incurred in making that decision, (3) the number of active duty military personnel who would purchase civilian health insurance, (4) and the benefits of retaining the current military health benefit as opposed to instituting a civilian group health insurance plan in its place. A questionnaire was developed in order to address these issues and gain new data in this area. Additionally, numerous studies and reports were reviewed, which provided analysis of the research questions.

A. QUESTIONNAIRE

A copy of the questionnaire used in this research can be found at Appendix A. One thousand five hundred questionnaires were mailed to students enrolled at the Naval Postgraduate School at Monterey, California. Of the 691 returned, 141 had missing data and one had been completed by a foreign military officer, leaving 549 questionnaires for analysis. For comparison purposes, the 15 item questionnaire included question that were asked on the 1978 Military Health Services Utilization Survey compiled by the Depart-

ment of Defense and a 1984 study performed by the Congressional Budget Office.

Several respondents volunteered comments regarding personal impressions and experiences with military and civilian medical treatment. These comments are compiled by question and can be found at Appendix B. The data from the questionaires were analyzed using the Minitab statistical program. The actual program and output used can be found at Appendix C.

B. SUPPORTING RESEARCH

Researchers cited in Chapter III used various methods in their studies. The Office of the Assistant Secretary of Defense (Health Affairs) devised a questionnaire and sampled over 3,000 active duty and retired personnel and their dependents in the Washington, D.C. area. Several of these studies used research previously performed and available from sources such as the Department of Defense, specifically the Military Health Services Utilization Survey conducted in 1978. The Rand Corporation initiated on-site visits to military treatment facilities and performed in-depth interviews with military health care providers. Coopers and Lybrand used available information from the Department of Defense, the Department of Health, Education and Welfare, and private health insurance carriers. Many of the findings in these reports are cited in this thesis for comparison purposes.

C. DEMOGRAPHICS

The questionnaire began by asking the respondents for demographic information. Tables III through VII provide this information by rank, gender, marital status, branch of service, and length of service.

TABLE III

RANK OF RESPONDENTS

Rank	Number	Percent
LTJG (O2)	8	1.4%
LT (O3)	425	77.4%
LCDR (O4)	110	20.1%
CDR (O5)	6	1.1%

TABLE IV

GENDER OF RESPONDENTS

Gender	Number	Percent
Male	494	89.9%
Female	55	10.1%

TABLE V

MARITAL STATUS OF RESPONDENTS

Status	Number	Percent
Married	433	78.8%
Single	116	21.2%

TABLE VI

BRANCH OF SERVICE OF RESPONDENTS

Branch	Number	Percent
Navy	421	76.6%
Army	52	9.6%
Marine Corps	40	7.3%
Air Force	19	3.4%
Coast Guard	17	3.1%

TABLE VII

YEARS OF SERVICE OF RESPONDENTS

Years	Number	Percent
10 or less	361	65.7%
11-15	144	26.2%
16 or greater	44	8.1%

D. RESEARCH QUESTIONS

The fifteen questions on the questionnaire were designed to determine the respondent's level of satisfaction with the current military health care benefit, their motivations for using civilian treatment facilities, and their use of civilian medical insurance plans. Their answers were compiled and used to answer the following research questions.

1. What number of active duty personnel use civilian medical facilities?

Questions 2, 3, 4, and 5 of the questionnaire, which asked respondents to give the number of times they had seen civilian and military health care providers in the last twelve months, were used to answer research question1. Results from the questionnaire showed that 57.3 percent of the respondents used civilian medical facilities in the last twelve months. This figure is somewhat higher than that cited in the 1978 Military Health Services Utilization Survey (MHSUS). Findings from that report cite 24.4 percent of the respondents used civilian health care during the previous 12 month period. It is possible that because the respondents of the Monterey survey are officers and are more likely to afford the costs of civilian care, their use would be higher than the group surveyed in the MHSUS.[Ref. 11]

A related question in the Rand study asked respondents to name their usual source for health care. The report noted that 9.6 percent of the respondents usually used civilian facilities.[Ref. 9:p. 86]

2. With what issues related to the current military health benefits are active duty personnel most satisfied? Least satisfied?

Levels of satisfaction with the military medical care benefit can be used to aid in understanding why active duty military members would choose to use civilian medical treatment facilities. Question 1 of the questionnaire asked the respondents to rate on a scale from 1 (very satisfied) to 5 (very dissatisfied) their level of satisfaction with a series of issues related to the military health care benefit. Responses to this question were used to answer research question 2. Overall satisfaction with factors associated with military medicine was rated a mean of 2.78, which was slightly better than the median of 3. Males were slightly more satisfied with military medicine than females, 2.76 and 2.85, respectively. Single service members were more satisfied with military medicine than married members, 2.54 and 2.83, respectively.

Data from the 1978 Military Health Services Utilization Survey showed 56.6 percent of the respondents stating they were satisfied with overall quality of medical care received, 23.8 percent were very satisfied, 14.1 percent were dissatisfied, and 5.5 percent were very dissatisfied.[Ref. 11:p. 46]

The data provided in Tables VIII through X show the levels of overall satisfaction of the questionnaire respondents delineated by rank, branch of service, and length of service. The tables show that satisfaction varies slightly with branch of service and that level of satisfaction tends to decrease with increasing rank and time in service.

TABLE VIII

LEVEL OF SATISFACTION BY RANK

RANK	SATISFACTION
0-2	2.45*
0-3	2.73
0-4	2.88
0-5	3.27

* 1 = very satisfied
  5 = very dissatisfied

TABLE IX

LEVEL OF SATISFACTION BY BRANCH OF SERVICE

BRANCH	SATISFACTION
U.S. Coast Guard	3.08
U.S. Marine Corps	2.90
U.S. Navy	2.79
U.S. Army	2.59
U.S. Air Force	2.54

TABLE X

LEVEL OF SATISFACTION BY
YEARS OF SERVICE

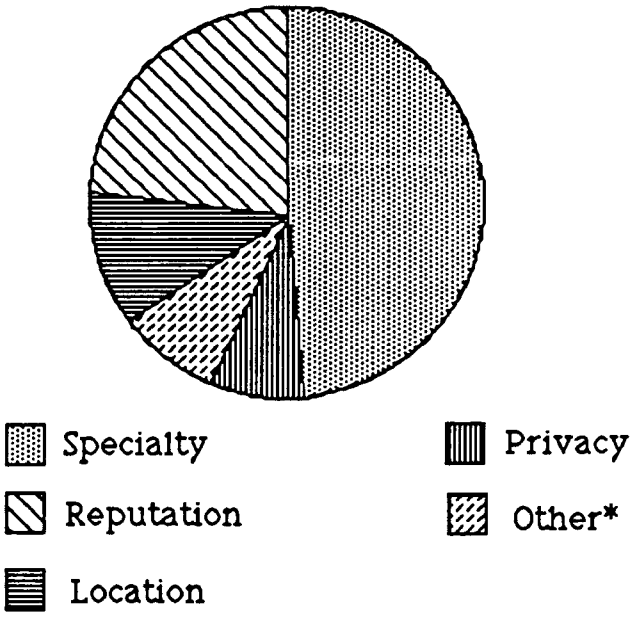
YEARS	SATISFACTION
6-10	2.73
11-15	2.72
16-20	2.89

3. Why do active duty personnel choose to use civilian medical facilities?

Question 7 of the questionnaire asked the respondents to identify factors that caused them to use civilian medical treatment. Findings from the questionnaire show that 314 respondents used civilian treatment facilities in the last twelve months. Of those, one hundred seventy-eight of the respondents identified their reasons for choosing to use civilian treatment facilities. Their responses are shown in Table XI.

TABLE XI

REASONS FOR CHOOSING CIVILIAN MEDICAL TREATMENT



* Written responses were speed of service, convenience, competency, and continuity.

Questions 11, 12, and 13 on the survey asked respondents to identify those factors that might cause them to prefer medical treatment by civilian or military health care providers. Respondents who stated they would prefer treatment by civilian health care providers (325 or 59.2 percent) did so for the following reasons, in order of priority: proficiency of health care providers, flexibility to choose health care provider, economical use of time, convenience, location, confidentiality of medical records, precautions instituted to ensure security of medical records, and cost.

In the 1978 MHSUS, respondents stated they were more satisfied with the following factors at civilian health care facilities than at MTF's: routine appointment procedures, available information about physicians, waiting time in clinics, doctor's concern for overall health, receptionist courtesy, physician courtesy, overall quality of care, and diagnostic information.[Ref. 11:p. 82]

Conversely, those service members stating a preference for medical treatment by military rather than civilian health care providers (224 or 40.8 percent) did so for the following reasons, in order of priority: cost, convenience, location, proficiency of health care providers, economical use of time, precautions instituted to ensure security of medical records, confidentiality of medical records, and flexibility to choose health care provider. These findings are supported by the 1978 MHSUS, in which the only factor beneficiaries stated they were more satisfied with at MTF's than at civilian health care facilities was out-of-pocket costs [Ref. 11:p. 81].

Universally, the factor registering the highest amount of satisfaction was the cost of military medicine, followed by location and confidentiality of medical records. The factor registering the lowest amount of satisfaction was economical use of time.

Selected comments on the survey that illustrate the respondents' personal concerns in this area are:

1. If military health care unit said I had a problem I would get a civilian second opinion and if concurrence, would have civilian hospital perform operation, paying for it myself. I don't trust military doctors with plastic knives at a picnic. (O3 single male)

2. Dissatisfaction with medical services center around the chop shop approach medical doctors/technicians take to examining you, taking care of you. Many instances of get them in-get them out attitude and quality of diagnosis is poor, incomplete or wrong. Has happened to me and other people I know. Civilian doctors tend to be more thorough. And I would switch if it didn't cost so much. (O3 single male)

3. Sick call is a good idea, better than civilian emergency room. I'm very satisfied with services. Perhaps we should have a Champus like program when specialists are needed and there are no qualified doctors at a local health care facility. (O4 married male)

4. Don't mess it up if it's not broken. (O3 single male)

5. Care I've received very good. Cost, convenience, location has made military health care a side benefit. Not the same for my family. May be time to consider reimbursement for civilian group health insurance for family. (O4 married male)

6. Most care has been good, but inconvenient and time consuming. (O4 married male)

7. I think precautions to ensure security/confidentiality of my health record are absurdly overzealous, in that personnel transferring PCS are not allowed to carry their health records any more. I would prefer to be treated at a military facility if they could fix them. Otherwise, I'd prefer to get quality care wherever. (O3 married male)

4. What personal expense is incurred by active duty personnel when choosing to use civilian medical facilities?

Question 6 of the questionnaire asked the respondents to specify the amount paid for civilian health care services and was used to answer research question 4. Of the 549 respondents, 105

(19.1 percent) paid for civilian health care during the last 12 month period. The average cost for care was $460, with a median of $180. The range was from $6 to $15,000.

The Congressional Budget Office reports that the average annual out-of-pocket expense is $225 for enlisted personnel and $160 for officers [Ref. 4:p. 4]. Findings from the thesis questionnaire are higher possibly because of the few number of responses and the individual who paid $15,000 in one year which might be viewed as an aberration. Excluding the $15,000, the average expense becomes $320, with a range from $6 to $3600.

5. **Would active duty personnel pay for civilian medical insurance? If so, how much would they be willing to pay?**

Questions 8, 9, 10, 14, and 15 of the questionnaire asked the respondents about the use and cost of privately held medical insurance plans. Responses to these questions were used to answer research question 5. Of the 549 respondents, 61 (11.1 percent) had at one time in their career carried civilian health insurance coverage. Results from the questionnaire show that 411 (74.8 percent) of the respondents would voluntarily pay health insurance premiums averaging $53 a month. The range was from $25 to $250. Of the 549 respondents, 461 (83.9 percent) would choose to participate in a government-sponsored and reimbursed health insurance program. The Congressional Budget Office reports that 13 percent of enlisted and officer personnel purchase private health insurance with annual premiums of $480 and $430, respectively [Ref. 4:p. 21].

The fact that military personnel would be willing to pay for medical care if it resulted in an improved package (higher satisfaction with care and quality of life factors) was further proven in the Congressional Budget Office's study. It showed that three out of four beneficiaries would be willing to pay an out-of-pocket fee for out-patient visits in return for various new benefits. Additionally, in a 1985 survey, 47 percent of married officers and 36 percent of married enlisted personnel expressed a willingness to join a Health Maintenance Organization (with a monthly fee of $20) as an alternative to CHAMPUS.[Ref. 12]

Selected comments on the survey that illustrate the respondents' personal concerns in this area are:

1. Do not desire any more cost than what I already have with current civilian life insurance company. (O4 married male)

2. My son has leukemia and all his care is civilian and would be exorbitant or uncovered by many civilian policies. (O3 married male)

3. I think a group health insurance program would particularly benefit servicemen with families and older retirees who might find the quality of military health care less than desirable. Military health care seems to be geared towards active duty members. A group health plan which could be continued after separating from active duty and which covers families would be beneficial. (O3 single male)

4. Better to pay our doctors more than to dream up some new and untried system. (O4 single male)

5. If it provided the same coverage as I currently receive. (O3 married male)

6. I would like to see an allowance for health care included in pay. However, I feel the policy should require proof that military member actually purchases sufficient health care for member and family. (O3 married male)

6. What are the benefits of eliminating the military health service system and replacing it with a civilian medical insurance plan?

Listed below are a compilation of the benefits of replacing the current military health care benefit with a civilian medical insurance plan. These comments were taken from the various studies and reports researched for this thesis.

1. Changing the current military medical care benefit to a plan covered by civilian insurance companies would eliminate the CHAMPUS program, would allow DoD to benefit from the cost saving reimbursement rates arranged through negotiations, and would lead to a significant reduction in the number and rate of payment changes for health care coverage [Ref. 1:p. 2-1].

2. Using contracts previously negotiated for FEHBP would alleviate the need to construct an administrative bureaucracy to negotiate contracts for military members [Ref. 12:p. 18].

3. Military retirees and their dependents and survivors receiving care currently through CHAMPUS are required to pay a higher percentage for coinsurance, on average, than private employees for civilian care [Ref. 1:p. ES-3].

4. A reduction in the number and types of services offered by MTF's has caused a decline in the direct care workload. The increased emphasis on military readiness has led to programs which have shifted some resources previously available for direct patient care to other activities. This reduction in services has also caused an increase in the cost and usage of CHAMPUS, which noted an increase of 52,000 admis-

sions between 1985 and 1987. Costs for CHAMPUS in 1987 were $2 billion and are expected to rise to $5.3 billion by 1995. [Ref. 1:p. ES-2]

5. Nine percent of military beneficiaries are age 65 or older compared to one percent of the privately-insured population. While those military retirees and their dependents over 65 are not eligible for CHAMPUS, they are eligible for care in MTF's. The over-65 population could affect total MHSS costs significantly, particularly as the baby boom generation begins to age and retire and more in this age group take advantage of MTF's benefits.[Ref. 1:p. 2-18]

6. The existing benefits package is ambigous in that it varies from time to time and from location to location according to the availability of health care facilities and medical personnel [Ref. 5:p. I-4].

7. Recipients believe that the value of the military care benefits has eroded and will continue to do so [Ref. 7:p. 33].

8. The general perception is that CHAMPUS is plagued by administrative difficulties and difficult to use [Ref. 5:p. I-4].

9. Currently, there are no alternative health care plans available to dissatisfied service members [Ref. 5:p. I-4].

10. Requiring medical personnel to remain on active duty to fulfill contingency needs in time of war is not a viable argument. There are not enough physicians currently in peacetime military medicine to fulfill the need in wartime. At the end of the fiscal year 1985, there were about 1400 surgeons serving on active duty. The services estimate that in time of war, there will be a need for at least 7000 surgeons.[Ref. 7:p. 32]

11. Few of the patients being seen now in peacetime military medicine have war-related diagnoses. Under present peacetime conditions, military health care providers have limited opportunity to practice war-related skills. If allowed to

practice in inner city hospitals on a rotation basis with required military treatment facilities such as ships and remote stations, medical personnel would be exposed to larger numbers of trauma patients. It is likely that many inner-city civilian hospitals have case mixes closer to probable wartime mixes than do military hospitals currently.[Ref. 7:p. 33] By eliminating the MHSS and stationing military physicians at civilian hospitals, the doctors would be given full privileges to ensure that they do not lose skills in any area of hospital care. This is currently being done at Fort Drum, an Army base in New York state, that is not large enough to justify the building of a small hospital. Instead patients go to local civilian hospitals where they see military doctors. [Ref. 7:p. 87]

12. Replacing CHAMPUS with a civilian medical insurance plan is also feasible and is currently being done. A demonstration test in the Tidewater area of Virginia contracts with a preferred provider organization (civilian health insurance company) to provide the delivery of comprehensive mental health services (including in-patient care, partial hospitalization, and out-patient care) and all administrative services relating to the delivery of mental health care for CHAMPUS-eligible beneficiaries. General experience points to a potential for savings of 10 percent to 20 percent. Assuming 20 percent savings, expanding the Tidewater concept to other areas of the country could reduce CHAMPUS expenditures by more than $20 million a year. Clearly in this instance, a civilian health insurance plan provides a dramatic savings.[Ref. 7:p. 77]

7. What are the negative aspects of eliminating the military health service system and replacing it with a civilian medical insurance plan?

Listed below are a compilation of the negative aspects of replacing the current military health care benefit with a civilian

medical insurance plan. These comments were taken from the various studies and reports researched for this thesis.

1. Redirecting or curtailing the use of health care services would have major implications for wartime medical readiness and for the satisfaction of beneficiaries. The overriding purpose of the military health care system is to be ready in time of war. The ability to treat battlefield casualties and to return as many as possible to duty (known as "recycling the wounded") would be crucial to sustaining U.S. forces in a major conventional conflict. In order to provide that number of health care professionals in the early days or weeks of combat, before large numbers of civilian physicians were mobilized, the military services would need to have physicians and support personnel on active duty capable of rendering the necessary surgical treatment.[Ref. 7:p. 31]

2. MHSS beneficiaries pay no premium contributions while average employee contributions per year in 1986 amounted to $72 for private individual coverage and from $324 to $504 for family coverage [Ref. 1:p. 3-2].

3. Many active duty personnel place high value on their medical care benefits. The services' attempt to change the current medical care package might be perceived as a reduction in that benefit and the willingness of military personnel to stay in the service might erode.[Ref. 4:p. 17]

4. The MHSS and private sector plans do not differ significantly in the basic health care benefits offered such as hospital, surgical, and in-patient professional services [Ref. 1:p. 3-1]. However, the MHSS and FEHB programs differ significantly from private sector health insurance plans in the extent of coverage available to retirees, with private sector plans generally restricting coverage to a greater extent [Ref. 1:p. 3-2].

5. Maintaining the present military care benefit would avoid any changes to the present system [Ref. 13].

6. Changing the current military medical care benefit to a plan covered by civilian insurance companies would necessitate a large administrative bureaucracy to negotiate contracts with civilian third parties, would cause DoD to lose control of most types of civilian policies offered to its beneficiaries, and would cause DoD to lose its ready access to medical information on military members [Ref. 13:p. 11].

7. Civilian sources of health care near some large concentrations of military beneficiaries may not be able to absorb an influx of currrent MHSS patients, just as some MHSS facilities now cannot handle all the military beneficiaries eligible for direct care [Ref. 4:p. 2].

8. Due to pressures from health insurance carriers to contain costs, length of hospital stays has been decreasing and care previously provided in the hospital is being provided on an out-patient basis, leading to sicker patients, on average, in both in-patient and out-patient settings [Ref. 1:p. 4-14].

V. CONCLUSIONS AND RECOMMENDATIONS

Several similarities exist between the data obtained from the questionnaire in this thesis and other studies performed both in and outside of DoD. The medical care benefit remains one of the most important issues to the peacetime military force, particularly health care for dependents. Factors of dissatisfaction noted 12 years ago in the Military Health Services Utilization Study of 1978 were the same cited in the present thesis questionnaire findings. Another similarity is that during the time between these two studies, DoD has been unable to determine accurately the cost of military care provided to beneficiaries. Although Congress directed such action in 1986, little progress has been made toward that requirement. The lack of accurate data prohibited in-depth cost analysis.

One difference between the research efforts, which may be attributed to the select group surveyed for this thesis, is that military personnel surveyed here are willing to take more of an active role in acquiring health care. A large number of officers said they are willing to pay private insurance premiums believing that they would receive better health care by doing so.

The military health care benefit is a very sensitive issue often addressed by DoD and the legislative branch of the government. The benefit is believed to be a strong recruitment and retention factor and fear exists that revising it will have a deleterious effect on military readiness. However, the cost of the benefit has escalated

and will continue to do so as the current active duty population ages and retires.

Because of the lack of accurate data regarding the cost of the military medical benefit, final conclusions on the cost effectiveness of replacing the current system with civilian medical insurance coverage cannot be drawn. Clearly, however, all research data cite dissatisfaction with the current system.

Full implementation of a civilian medical insurance coverage plan would require significant changes in organization and management. However, demonstrations, such as the Fort Drum project that uses civilian treatment facilities and the Tidewater project that uses civilian insurance plans to cover psychiatric care, have been tested and proven to be successful. In addition, CHAMPUS has introduced the concept of deductibles and acquainted military personnel with insurance coverage forms and documents that would become commonplace if the plan was adopted.

Much research remains to be done and many questions must be answered before a civilian medical insurance coverage plan could be adopted. The true impact of the current military health care benefit on recruitment and retention must be determined. Also, data must be collected that will provide DoD with an accurate assessment of the cost of the military medical benefit. Without this costing information, any discussion of revising the current military medical system is futile. Only then could other issues be addressed, such as the need to maintain military medical facilities in remote locations, overseas, and aboard ships; how medical personnel would be rotated

between civilian and military treatment facilities; how much coverage the government should provide and how much the beneficiary would be required to contribute towards a civilian health insurance plan; how medical information on military personnel would be relayed to and tracked by DoD; and finally, what effect the large influx of military personnel into civilian treatment facilities would have on the care provided.

APPENDIX A

A COPY OF THE QUESTIONNAIRE

Rank (Please use O or E, O-3 or E-7 for example) _____
Branch of Service _____
Length of Service _____
Marital Status (Circle the appropriate one): Single Married
Sex (Circle the appropriate one): Male Female

1. Below are issues concerning military health care. Please circle the number which corresponds most accurately to your level of satisfaction with each factor.

	Very Satisfied				Very Dissatisfied
Quality of care provided	1	2	3	4	5
Convenience	1	2	3	4	5
Location	1	2	3	4	5
Cost	1	2	3	4	5
Proficiency of health care providers	1	2	3	4	5
Your flexibility to choose the health care provider	1	2	3	4	5
Precautions instituted by health care facility to ensure security of your medical record	1	2	3	4	5
Confidentiality of your medical record	1	2	3	4	5
Economical use of your time	1	2	3	4	5
Attitude of health care provider	1	2	3	4	5

2. About how many times in the last 12 months have you seen a military health care provider? _____

3. How many of these visits were non-illness related? (Physicals, immunizations, check-in, check-out, etc.) _____

4. About how many times in the last 12 months have you seen a civilian health care provider? _____

5. How many of these visits were non-illness related? _____

6. In total, about how much did you pay for these civilian health care providers' services? _____

7. Please circle any of the factors below which prompted you to use a civilian health care provider.

LOCATION (closer than military health care facility)
SPECIALTY (service not provided to your satisfaction by military health care facility)
PRIVACY (preference for non-disclosure to military service)
REPUTATION (proven performance)
OTHERS (please state briefly)_____

_____

_____

8. At any time during your active service, were you/are you covered by a civilian medical insurance policy? Yes No

9. Was/is the coverage in conjunction with a policy provided by your spouse's employer? Yes No N/A

10. Did you/are you paying for any part of the civilian medical insurance policy? Yes No N/A

11. Would you prefer to receive health care from a civilian health care facility? Yes No

12. If your answer to number 11 was NO, circle any of the following factors regarding MILITARY health care facilities which influenced your decision. If your answer to number 11 was YES, go to number 13.

    Convenience
    Location
    Cost
    Proficiency of health care providers
    Flexibility to choose health care provider
    Adequate precautions instituted to ensure security of medical records
    Confidentiality of your medical record
    Economical use of your time
    Other_____

13. If your answer to number 11 was YES, circle any of the following factors regarding CIVILIAN health care facilities which influenced your decision.

    Convenience
    Location
    Cost
    Proficiency of health care providers
    Flexibility to choose health care provider
    Adequate precautions instituted to ensure security of medical records
    Confidentiality of your medical record
    Economical use of your time
    Other_____

14. Civilian group health insurance policies vary in price due to benefits provided and the company underwriting the policy. Group policy prices range from a low of $25 to a high of $250 per month, with average payments of $50. On the scale below, circle the amount which corresponds to the most you would be willing to pay per month for a civilian group health insurance policy.

    $0 $25 $50 $100 $150 $250

15. If the government reimbursed you for health insurance premiums, like BAQ (Basic Allowance for Quarters), would you choose to purchase such a policy? Please circle the appropriate answer. Yes No

Thank you very much for your cooperation in this survey.

APPENDIX B

COMMENTS ON QUESTIONNAIRES

The following comments were provided by the questionnaire respondents. They are listed in order by question number. A copy of the questionnaire can be found at Appendix A. The comments are unedited.

A. Question 1

Respondents were asked their level of satisfaction with a number of factors related to the current military health care benefit.

1. Military health care is space A even for active duty. As an aviator I usually have to make an appointment to get a routine flight physical 3 months in advance because the hospitals are overcrowded, underfunded, and understaffed. Everyone has access to my record except me. Try to just look at your record, it takes an act of congress for the corpsman to get it for you. Almost all the health care providers act like they do me a favor by doing their job. I was bitten by a rabid dog and had to wait 3 hours to get in the emergency room. (03 married male)

B. Question 7

Respondents were asked which factors prompted them to use civilian health care providers.

1. Points of dissatisfaction--pharmacy service notoriously slow, staff severely undermanned, notified EENT clinic of surgery prescribed by previous command over 6 months ago and still not scheduled, emergency room care takes almost as long as a visit to the pharmacy. After a recent visit for stitches, it took

over an hour to get followup care. How difficult is it to look at week old stitches? (O3 married male)

2. I haven't been very impressed with PA's. (O3E single female)

3. The reasons I was seeing civilian medical professionals were: I wear contact lenses and I required the services of an infertility clinic. Neither of which are provided by the military. I am also upset with the lack of provision for dental care for dependents. I had better medical/dental benefits when I worked as a grocery clerk while attending college. I would choose my own doctors and the company would pay 80% of the bills. This coverage applied to my spouse and children as well. (O4 married female)

4. Test data lost or improperly recorded. Personnel are difficult to deal with. I avoid medical treatment facilities as must as possible. (O3 single female)

C. Question 11

Respondents were asked if they would prefer to receive health care from a civilian health care facility.

1. I have not attended civilian hospitals but my wife does at every opportunity. Appointments are very difficult to come by for dependents. She completed her first trimester of pregnancy without a single medical appointment due to overcrowded conditions. They refused to Champus her out, regardless of these conditions. (O3 married male)

2. I would rather have the military give dependent health services to the civilian sector and have the military health care services for active duty. I would also like to see the medical profession in the Navy become part of the military. It has become, partly because of dependent care too overloaded and unprofessional. There should be more leadership there and then maybe the organization would be military like. I would like to say that none of this discussion pertains to the dental corps of the Navy.

They are well staffed and organized. I have enjoyed going to them and have been very impressed with them. (05 married male)

3. My main concern for my health needs are those of my family. As a Major, I generally get fairly good service. My wife and children receive poorer medical benefits than my brother-in-law through his labor union. The delays are severe, although the individual service is usually good when they get it. (04 married male)

4. Champus really provides pretty good service in my opinion, but I think they should expand the types of treatments that they cover. (03 married male)

5. Ideally, I would prefer the military because of my familiarity and trust in the organization. Currently, the quality of military health care is UNSAT, but I'd prefer to see the military squared away before going civilian. (03 married male)

6. My wife is an RN who knows the scoop on the local doctors where we have lived. Many of the top doctors were ex-Navy so I don't think military medicine is as bad as people say. I would just like to have more say in choosing healthcare. (03 married male)

7. Dependent wife does not like military health care--for example--birth of two children--we got statement of nonavailability and used civilian hospital with Champus. Other health care has been adequate. (04 married male)

8. I would prefer to receive civilian health care provided the savings realized from disestablishing the military health structure is used to finance the civilian health insurance plan and there is a very simple set of rules regarding coverage, unlike Champus. (03 single male)

9. I've answered yes to wanting civilian care and yes to being willing to pay. If the coverage of the group plan were as

limited as that under the Delta Dental Plan, I'd rather stick with military health care. (03 married male)

10. I currently pay $400 a month for health care provided by a civilian because of the confidentiality aspect (family/ marriage/personal counseling). As an active duty officer, I feel I receive more courtesy and attention than do dependent wives or children. One of the major reasons I joined the military was health care, now and in the future. Unfortunately on that issue I made a poor choice. Major corporations offer much better health care options for their employees. (03 married female)

11. What happened to medical readiness? I like to think we'll have trained military medical personnel when we need them. (03 married male)

12. I feel the military should provide health care for active duty members. If the military health care system is overburdened by the combination of active duty, dependents, retirees and widowers may be the answer is a mix of both military health professionals for active duty members and a civilian facility for other needs. (03 married male)

13. I would like to see all dependent care transferred to some type of group health program. (03 married male)

14. This has always been an advantage of being in the military. (03 married male)

15. I look at the healthcare provided by the service as a disincentive. When my wife works we use her health plan. (03 married male)

16. Military coverage is adequate. (03 single male)

17. This is difficult to answer definitely because of the PCS moves required. It's a hassle to reevaluate very HMO or BCBS coverage available in each new area. Some people may have coverage lapses because they aren't aware that changes in policies may

be required. It may not be a good idea to even offer such an option without educating the participants or just in general because we're so mobile. (03 married female)

18. I'd have to be on my death bed before I'll consider even going to see a military doctor. (03 married male)

19. Overall services currently OK. Only thing that I see than needs improving and which I have considered consulting a civilian provider for is OB/GYN services. (03 single female)

20. The health care provided to service members is generally very good. Care is substandard for dependents, however. Nonavailability of appointments, attitude of health care providers, conflicting information from difference appointment desks, time delay for Champus payments and low Champus share of cost all add up to make the program a very poor one. Health care for dependents is something the Navy advertised it would provide when I signed on. Placing dependent care quality and service on at the same level as that of a wefare patient at a free clinic is not meeting that requirement. (03 married male)

21. I feel that health care with civilian health care workers is much better than with military health care. (04 married male)

22. Basically, I'd like the option to Champus out to a civilian doctor. As it is now, there is a great disparity between medical facilities--both in attitude of the personnel toward the patients as well as the care provided. As an aviator I am required to take a flight physical every year. Every 3 years, NAMI in Pensacola reviews your fight physical. NAMI has a well deserved reputation for ending your flying career or thoroughly frustrating you by its bureaucracy. As a result, I only go to a doctor when absolutely necessary and never disclose any thing to the flight surgeon that could be misinterpreted. I'd feel better at least if I knew that I could ask the doctor a question without ending my career. (03 married male)

23. Quality of care and availability vary tremendously from duty station to duty station and overtime at a single station. This is especially true of emergency room care. I am not sure that going to a civilian institution will change this that much. Civilian hospitals are already extremely overworked and understaffed. What makes me lean towards yes for civilian care is that there are specialty gaps in the service care. In metropolitan stations these gaps can be covered by civilians. In more remote stations this would not be so. My concerns about going civilian entail the problems this would cause in case of war. Would the services have the doctors readily available until a call up can be done? And in overseas and remote stations, not only quality of care from foreign trained doctors, but also language and cost. (03 single female)

24. Believe we must keep some military medicine and establishment for defense readiness. I would like to see a program whereby a member could opt to go outside military care system and pay 2% of costs out of pocket. This would ease military system overcrowding. In general, military hospital care is OK once you get past the gate keepers, the appointment clerks and sick call lines. The doctors and nurses are skilled. There is a dangerous lack of continuity of care in many cases. The doctors who initially oversaw case is PCS or on leave or TAD and just isn't assigned your case this time. (03 married male)

25. I prefer the military system. (03 single male)

26. I believe only active duty and retired personnel should be served by military health care facilities. All dependents should be under a civilian type health care insurance with payments made reimbursable. With this health care set up, both active duty/retired and dependents can be served much better. I believe the present system is too overburdened. The present system is taking care of much more than it was designed. (03 married male)

27. As a military member, I feel I am entitled to medical care at military facilities. I think the biggest problem is overcrowding of facilities. I think we'd all be better off with a group plan for dependents that works more efficiently than Champus and I'd be willing to spend $50 a month on it. At least we wouldn't have trouble when something unexpected occurs, as we often do with Champus. (03 married male)

28. My main concern is that we as active duty military do not really have the option to choose health care from a civilian provider. In one case, I desired a second opinion as the military doctor I saw prescribed a treatment totally contrary to that which I had followed before. One 30 minute office visit cost over $200 which I cannot afford on a regular basis. Luckily, the civilian doctor agreed with the military doctors advice so I continue to receive military health care. In the military health care system, we do not have a choice as to whom our doctor is. If we don't like who we get, it is very difficut to switch and get another one as the military is not really concerned about our personal preference. Some means needs to be instituted into the system to take this personal preference into account, and health insurance is surely one viable avenue. (03 married male)

29. In the eight years I have been coverd by the military medical system, I have only had one major incident requiring medical attention. In Jan 84, I had an operation on my right shoulder by a Navy doctor at a civilian hospital. The care was excellent but I had one of the Navy's best orthopedic surgeons doing the operation. One reason that I am in the military is the fact that I don't have to pay for my medical benefits. I do not want to pay for medical care. I do not think that making civilian medical care available is the answer. (03 married male)

30. The military has always boasted free medical care for its members but it is worth about what we pay for it--nothing. (03 married male)

D. Question 12

Respondents were asked to identify factors which influenced their preference for military health care.

1. Sick call is a good idea, better than civilian emergency room. I'm very satisfied with services. Perhaps we should have a Champus like program when specialists are needed and there are no qualified doctors at a local health care facility. (O4 married male)

2. Care I've received very good. Cost, convenience, location has made military health care a side benefit. Not the same for my family. May be time to consider reimbursement for civilian group health insurance for family. (O4 married male)

3. I believe that we need to charge a small fee for each visit to a military medical facility. This will eliminate a great number of people that go to the doctor when they have a hang nail. They will go only when theyreally need to go. This will cut down the work load and overall give us better medical care. This bill could be as little as $5.00. (O3 married male)

4. Don't mess it up if it's not broken. (O3 single male)

5. I think that the military health care is overburdened, but does a relatively adequate job considering its resources. My dental care has been second to none. I have had some real pros take care of my dental care needs. The military has to be willing to pay their doctors to stay in the military, because we may need them in a crisis so we cannot just rely on civilians. As a future retiree, I would like to have these services available in my retirement days. If the military gets rid of their health care this benefit will disappear. (O3 married male)

6. Most care has been good, but inconvenient and time consuming. (O4 married male)

7. I feel medical benefits are part of the benefits quaranteed me when I opted for a career of military service. (O4 married male)

8. Military doctors are more familiar with active duty military life and problems. Good medical care is generally not a problem for active duty military. It is a severe problem for dependents. I would rather have my pro-rated share of the military's money for medicine and purchase a medical plan less vulnerable to congressional whims, DOD management games and ultimately choose a family doctor who knows my dependents and has an established reputation. (O4 married male)

9. Aviators cannot be treated by civilians. (O3 married male)

10. It's imperative that we make the existing military health care system work. E1-E4's shouldn't have to worry about health insurance. Free, competent health care is what they signed up for and it's what they should get. (O3 single male)

E. Question 13

Respondents were asked to identify factors which influenced their preference for civilian health care.

1. Continuity of care. How does a military doctor know that his prescriptions are correct unless he sees the same patient next time? (O4 married male)

2. My wife had been to the military medical facility several times for abdominal pain/severe cramps. She was repeatedly given Mylanta and told to drink peppermint tea. Although she informed the doctors of a family history of colon cancer they contributed her pain to stress and gas. Finally we went to an outside physician who was aggressive and ordered the appropriate tests. Bottom line, a tumor the size of a tennis ball had completely blocked her transverse colon and she has since undergone two operations for colon cancer and liver cancer. Both operations were performed outside of military health care. (O3 married male)

3. I think precautions to ensure security/confidentiality of my health record are absurdly overzealous, in that personnel transferring PCS are not allowed to carry their health records any more. I would prefer to be treated at a military facility if they could fix them. Otherwise, I'd prefer to get quality care wherever. (03 married male)

4. Most dissatisfied with dental aspect of health care. (03 married male)

5. The issue for me is not my health care, it is that of my dependents. The bulk of my dissatisfaction with military health care comes from experiences of my dependents. By and large, my health care has been excellent. (03 married male)

6. It's pretty damned bad when various medical facilities have lost medical records 6 times, dental records 3 and misfiled information repeatedly. Many medical personnel seem to have the attitude they are doing you a favor to do their jobs. What's your option for war time--contract civilians on the front line? (03 married male)

7. I am not as concerned about the quality of health care for myself--overall, it has been very good. However quality of care for my dependents is a different story. The only time they went to a military clinic was to get a civilian prescription filled. I would be very interested in a better health insurance plan for them--Champus sure doesn't cut it. (04 married male)

8. If military health care unit said I had a problem I would get a civilian second opinion and if concurrence, would have civilian hospital perform operation, paying for it myself. I don't trust military doctors with plastic knives at a picnic. (03 single male)

9. Dissatisfaction with medical services center around the chop shop approach medical doctors/technicians take to examining you, takingcare of you. Many instances of get them in-get them out attitude and quality of diagnosis is poor, incomplete or wrong. Has happened to me and other people I know. Civilian

doctors tend to be more thorough. And I would switch if it didn't cost so much. (03 single male)

10. Medical facilities for active duty are adequate at best but for the family are very unsatisfactory. The inconveniences that my family must go through plus the lack of continuity of the doctors forces me to have a private pediatrician. Health care for the family is more important to me--I can handle the military medical facilities and their problems. Five years ago I had viral menengitis and was diagnosed as having a hangover. I pursued the problem until I was evaluated at Bethesda by a competent doctor. I can handle that mistake for me but imagine if my child had the same illness and was diagnosed as growing pains are a plain headache--the suffering the child would go through is not acceptable and those mistakes are not tolerated. My family gets the best than I can give them regardless of the cost. (04 married male)

F. Question 14

Respondents were asked the amount of money they would voluntarily spend on a group health insurance plan.

1. Do not desire any more cost than what I already have with current civilian life insurance company. (04 married male)

2. My son has leukemia and all his care is civilian and would be exorbitant or uncovered by many civilian policies. (03 married male)

3. I am single and have been exceptionally healthy. Consequently, I have made very little use of health care services beyond routine physicals and immunizations. For a person in my situation, the additional expense of a group health care policy would have been a waste of money and another unnecessary paperwork burden for me and the government. (03 single male)

G. Question 15

Respondents were asked if they would purchase a civilian health insurance plan if the premiums were reimbursed by the government.

1. A health care plan has been the optimal solution to the military's needs for quite some time. Hospitals and clinics are stressed by the number of active duty, dependents and retirees so much so that it would be beneficial to farm out one or more of these groups via a health care plan. Security of medical records isn't the problem--it's trying to wrestle it loose from those maintaining. it. You're treated like a criminal if you want to look and it and take it home. Lost paperwork is also a problem. (O4 married male)

2. I think a group health insurance program would particularly benefit servicemen with families and older retirees who might find the quality of military health care less than desirable. Miltary health care seems to be geared towards active duty members. A group health plan which could be continued after separating from active duty and which covers families would be beneficial. (O3 single male)

3. Better to pay our doctors more than to dream up some new and untried system. (O4 single male)

4. Full reimbursement only. Champus is a scam. I entered the military with the expectation of receiving free medical care. Paying $50 deductible or any additional cost is not free medical care. This is not a major problem for the young military personnel, but consider the retired personnel. When young, hospital visits for illness are rare. Retired personnel are the people who suffer the most from the current policies. Older people often have more illnesses thus more hospital visits. After time costs begin to add up and on a fixed income, this is not good. If the military cannot provide free medical care then any cost to me should be completely tax deductible. I'm tired of fewer and fewer benefits. (O3 married male)

5. I would profit by not buying much insurance. My family is very healthy. (03E married male)

6. If they reimbursed the entire cost, I would. (03 married male)

7. Gov't funding of a program tends to drive net costs up. (04 married male)

8. They never reimburse you satisfactorily. The service member always ends up on the short end. I'd recommend leaving the system alone unless the military just handled the insurance directly. (03 married male)

9. I would be willing to participate in military health insurance so long as there wouldn't be any deductible such as the Blue Cross Blue Shields 20%. (03 single male)

10. Health care is a military benefit which shouldn't be messed with. Any switch to a civilian health care program will eventually cost the service member money. (03 married male)

11. Would retain military. Civilian insurance too much of a hassle, paperwork, especially for single people. (04 single male)

12. If the government instituted what is recommended, on a voluntary basis, sign up if and when you choose then I would probably choose to do so when I felt it was necessary. Otherwise, I wouldn't choose to place that additional expense on an already strained gov't budget which has provided me adequate health care. (03 single male)

13. I'd rather see more military contract clinics--clean, more business like and customer oriented. (03 married male)

14. If it provided the same coverage as I currently receive. (03 married male)

15. No, because, like BAQ, as costs go up the gov't allowance for them wouldn't. (03 married male)

16. Yes, I would use the services, however I don't want to hassle with being reimbursed by the government. If this option is available, the government should make the payments or the money should go directly into my pay check so that I can make out an allotment for the premiums. (03 married male)

17. The Federal Government would be creating yet another area of administration. In the long run, a waste of budget money. (03 married male)

18. Probably a lot depended upon the coverages available. I have a gut feeling that coverage would be poor and it would get worse. (03 single female)

19. Who do you know that's not living in gov't housing that chooses not to collect BAQ? (03 married male)

20. My daughter suffered a punctured eyeball and was treated by a civilian specialist in an emergency situation. We are still caught in the middle between the health care provider and Champus--due to the incompetence of Champus. (03E married male)

21. The best coverage would be a family policy. Military people should be in better health than the general population, so costs could be measurably lower. (04 married male)

22. DOD shold get out of the dependent health care business. They are not equipped for it and frankly are lousy at it. The services should care for active duty mission oriented personnel and keep just enough facilities and trained medical personnel to provide an infrastructure for wartime contingencies. (03 married male)

23. I would like to see an allowance for health care included in pay. However, I feel the policy should require proof that military member actually purchases sufficient health care for member and family. (03E married male)

24. You only asked about insurance for me. I don't worry too much about myself, and I get reasonable service at military facilities because I'm an active duty LCDR, and I demand it. But I spent over $8000 last year out of my own pocket on civilian medical services for my dependents because the civilians provided better care. Both of my dependents now have medical insurance policies. (O4 married male)

25. How might such a health insurance cover a serviceman serving overseas, aboard ship, or at a station without civilian health care facilities? (O3 married male)

26. I wouldn't want my benefit provided to me now taken away without some sort of compensation (paying the majority of a civilian health benefit plan premium) returned to me. (O4 married male)

27. If the government provided a single insurance policy to cover all cases for all military and their dependents and paid the premium in full, I would go for that. (O2 married male)

28. I assume many policies would be local and this might be difficult to implement for overseas tours. (O3 single female)

29. BAQ would have to cover entire cost of care for me to desire this program. Not like our uniform allowance that covers only a fraction of uniform costs. (O4 married male)

30. If there were no longer military health care. (O3 single female)

31. It would probably end up insufficient like BAQ. (O3 married male)

32. The cost of health care would increase more rapidly than the medical allowance. How much of your rent does your BAQ pay for -- 50% ifyou are lucky. (O3 married male)

33. Only if it was the only way the gov't would provide me medical treatment. (O3 married male)

34. Employer should pay, with a deductible to be met by the family and a minimum per visit fee assumed by the family. (05 married male)

35. I consider the current health care benefits as part of my overall compensation. I believe that service members should have better health care both quantitatively and qualitatively but they shouldn't be expected to pay anymore for it. BAQ/VHA is becoming a failure as a program and I would be concerned to have the same happen to health care. In the upcoming era of declining budgets, I am exceedingly wary of any compensation change as it will be driven by cost--not quality or quantity. (03 married male)

APPENDIX C

MINITAB PROGRAM

```
MTB > desc c6-c15

          N     MEAN   MEDIAN    TRMEAN    STDEV   SEMEAN
Qual    549   2.7123   3.0000   2.6888   0.9976   0.0422
Conv    549   3.0492   3.0000   3.0845   1.1539   0.0492
Local   549   2.4736   2.0000   2.4484   0.9387   0.0401
Cost    549   1.5416   1.0000   1.4321   0.8596   0.0367
Prof    549   2.7032   3.0000   2.7536   0.9888   0.0419
Flex    549   3.4264   4.0000   3.6888   1.0979   0.0444
Sec     549   2.4794   3.0000   2.4444   1.0958   0.0467
Conf    549   2.8264   3.0000   2.8747   1.0478   0.0456
Eco     549   3.0679   4.0000   3.0414   1.1114   0.0474
Att     549   2.9016   3.0000   2.8989   1.0988   0.0469

          MIN      MAX       Q1       Q3
Qual   1.0000   5.0000   2.0000   3.0000
Conv   1.0000   5.0000   2.0000   4.0000
Local  1.0000   5.0000   2.0000   3.0000
Cost   1.0000   5.0000   1.0000   2.0000
Prof   1.0000   5.0000   2.0000   3.0000
Flex   0.0000   5.0000   3.0000   4.0000
Sec    1.0000   5.0000   2.0000   3.0000
Conf   1.0000   5.0000   2.0000   3.0000
Eco    1.0000   5.0000   3.0000   4.0000
Att    1.0000   5.0000   2.0000   4.0000

MTB > copy c6-c15 c40-c57;
SUBC> use 'Rank' = 2.
MTB > desc c40-c57

          N     MEAN   MEDIAN    TRMEAN    STDEV   SEMEAN
C40       0   2.625    3.000    2.625    0.916    0.324
C49       0   2.250    2.000    2.250    1.165    0.412
C50       0   1.750    2.000    1.750    0.707    0.250
C51       0   1.125    1.000    1.125    0.354    0.125
C52       0   2.375    2.500    2.375    0.744    0.263
C53       0   3.750    4.000    3.750    0.886    0.313
C54       0   2.750    3.000    2.750    1.282    0.453
C55       0   2.625    2.500    2.625    1.302    0.460
C56       0   3.375    3.500    3.375    1.408    0.498
C57       0   2.375    2.500    2.375    0.744    0.263

          MIN      MAX       Q1       Q3
C40    1.000    4.000    2.000    3.000
C49    1.000    4.000    1.250    3.500
C50    1.000    3.000    1.000    2.000
C51    1.000    2.000    1.000    1.000
C52    1.000    3.000    2.000    3.000
C53    2.000    5.000    3.250    4.000
C54    1.000    4.000    1.250    4.000
C55    1.000    4.000    1.250    4.000
C56    1.000    5.000    2.250    4.750
C57    1.000    3.000    2.000    3.000

MTB > copy c6-c15 c40-c57;
SUBC> use 'Rank' = 3.
MTB > desc c40-c57

          N     MEAN   MEDIAN    TRMEAN    STDEV   SEMEAN
C40     425   2.4800   2.0000   2.4214   0.9403   0.0472
C49     425   3.0306   3.0000   3.0359   1.1499   0.0558
C50     425   2.4635   2.0000   2.4334   0.9388   0.0455
C51     425   1.5224   1.0000   1.4125   0.8496   0.0412
C52     425   2.7671   3.0000   2.7415   0.9869   0.0479
C53     425   3.5765   4.0000   3.6681   1.0920   0.0530
C54     425   2.6282   3.0000   2.5875   1.1066   0.0537
C55     425   2.4776   2.0000   2.4294   1.0729   0.0520
C56     425   3.0424   4.0000   3.0217   1.0806   0.0524
C57     425   2.8753   3.0000   2.8616   1.1016   0.0534

          MIN      MAX       Q1       Q3
C40    1.0000   5.0000   2.0000   3.0000
C49    1.0000   5.0000   2.0000   4.0000
C50    1.0000   5.0000   2.0000   3.0000
C51    1.0000   5.0000   1.0000   2.0000
C52    1.0000   5.0000   2.0000   3.0000
C53    0.0000   5.0000   3.0000   4.0000
C54    1.0000   5.0000   2.0000   3.0000
C55    1.0000   5.0000   2.0000   3.0000
C56    1.0000   5.0000   3.0000   5.0000
C57    1.0000   5.0000   2.0000   4.0000
```

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Rank' = 4.
* ERROR * Error in subcommand
SUBC> use 'Rank' = 4.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	110	2.0909	3.0000	2.0779	1.0435	0.0995
C41	110	3.164	3.000	3.184	1.154	0.110
C50	110	2.5182	2.0000	2.4756	0.9960	0.0964
C51	110	1.6364	1.0000	1.5294	0.9160	0.0873
C52	110	2.0455	3.0000	2.0367	0.9879	0.0942
C53	110	3.727	4.000	3.786	1.081	0.103
C54	110	2.0273	1.0000	2.0041	1.0214	0.0974
C55	110	2.6909	3.0000	2.6521	1.0293	0.0981
C56	110	3.918	4.000	4.020	1.102	0.113
C57	110	3.818	5.000	3.820	1.100	0.105

	MIN	MAX	Q1	Q3
C40	1.0000	5.0000	2.0000	4.0000
C41	1.000	5.000	2.000	4.000
C50	1.0000	5.0000	2.0000	3.0000
C51	1.0000	5.0000	1.0000	2.0000
C52	1.0000	5.0000	2.0000	4.0000
C53	1.000	5.000	3.000	5.000
C54	1.0000	5.0000	2.0000	3.0000
C55	1.0000	5.0000	2.0000	3.0000
C56	1.000	5.000	3.000	5.000
C57	1.000	5.000	2.000	4.000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Rank' = 5.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	6	3.333	3.500	3.333	1.033	0.422
C41	6	3.333	3.500	3.333	1.211	0.494
C50	6	3.333	3.500	3.333	1.211	0.494
C51	6	1.667	1.500	1.667	0.816	0.333
C52	6	3.333	3.000	3.333	1.033	0.422
C53	6	3.833	4.000	3.833	1.169	0.477
C54	6	3.500	3.000	3.500	0.837	0.342
C55	6	2.833	3.000	2.833	0.983	0.401
C56	6	4.500	5.000	4.500	0.837	0.342
C57	6	3.333	3.000	3.333	1.033	0.422

	MIN	MAX	Q1	Q3
C40	2.000	5.000	2.750	4.250
C41	2.000	5.000	2.000	4.250
C50	2.000	5.000	2.000	4.250
C51	1.000	3.000	1.000	2.250
C52	2.000	5.000	2.750	4.250
C53	2.000	5.000	2.750	5.000
C54	2.000	5.000	3.000	4.250
C55	1.000	4.000	2.500	3.250
C56	3.000	5.000	3.750	5.000
C57	2.000	5.000	2.750	4.250

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Rank' = 1.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	494	3.6984	5.0000	3.8644	0.9840	0.0444
C41	494	3.0526	3.0000	3.0886	1.1522	0.0518
C50	494	2.4798	2.0000	2.4504	0.9310	0.0419
C51	494	1.5547	1.0000	1.4459	0.8617	0.0388
C52	494	2.7874	3.0000	2.7635	0.9792	0.0441
C53	494	3.6154	4.0000	3.6444	1.0789	0.0485
C54	494	2.6538	3.0000	2.6149	1.0938	0.0492
C55	494	2.5000	2.5000	2.4637	1.0596	0.0477
C56	494	3.8219	4.0000	3.9009	1.1126	0.0501
C57	494	3.9069	5.0000	3.9944	1.1029	0.0496

	MIN	MAX	Q1	Q3
C40	1.0000	5.0000	2.0000	5.0000
C41	1.0000	5.0000	2.0000	4.0000
C50	1.0000	5.0000	2.0000	3.0000
C51	1.0000	5.0000	1.0000	2.0000
C52	1.0000	5.0000	2.0000	3.0000
C53	0.0000	5.0000	3.0000	5.0000
C54	1.0000	5.0000	2.0000	3.0000
C55	1.0000	5.0000	2.0000	3.0000
C56	1.0000	5.0000	3.0000	5.0000
C57	1.0000	5.0000	2.0000	4.0000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Sex' = 2.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	55	2.836	3.000	2.796	0.996	0.134
C49	55	3.018	3.000	3.020	1.178	0.159
C50	55	2.418	2.000	2.347	1.011	0.137
C51	55	1.418	1.000	1.286	0.832	0.112
C52	55	2.745	3.000	2.714	1.004	0.135
C53	55	3.727	4.000	3.837	1.178	0.159
C54	55	2.909	3.000	2.898	1.076	0.145
C55	55	2.764	3.000	2.735	1.122	0.151
C56	55	4.182	4.000	4.127	1.056	0.142
C57	55	2.855	3.000	2.837	1.061	0.143

	MIN	MAX	Q1	Q3
C40	1.000	5.000	2.000	3.000
C49	1.000	5.000	2.000	4.000
C50	1.000	5.000	2.000	3.000
C51	1.000	5.000	1.000	2.000
C52	1.000	5.000	2.000	3.000
C53	0.000	5.000	3.000	5.000
C54	1.000	5.000	2.000	4.000
C55	1.000	5.000	2.000	3.000
C56	1.000	5.000	4.000	5.000
C57	1.000	5.000	2.000	4.000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'M' = 1.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	433	2.7898	3.0000	2.7661	0.9788	0.0470
C49	433	3.1109	3.0000	3.1234	1.1392	0.0547
C50	433	2.4965	2.0000	2.4679	0.9332	0.0448
C51	433	1.6097	1.0000	1.5013	0.8033	0.0424
C52	433	2.8560	3.0000	2.8486	0.9881	0.0471
C53	433	3.6975	4.0000	3.7506	1.0607	0.0514
C54	433	2.7113	3.0000	2.6787	1.1044	0.0531
C55	433	2.5520	3.0000	2.5015	1.0509	0.0505
C56	433	3.9492	4.0000	4.0160	1.0638	0.0511
C57	433	3.0069	3.0000	3.0077	1.0790	0.0519

	MIN	MAX	Q1	Q3
C40	1.0000	5.0000	2.0000	3.0000
C49	1.0000	5.0000	2.0000	4.0000
C50	1.0000	4.0000	2.0000	3.0000
C51	1.0000	5.0000	1.0000	2.0000
C52	1.0000	5.0000	2.0000	4.0000
C53	0.0000	5.0000	3.0000	5.0000
C54	1.0000	5.0000	2.0000	3.0000
C55	1.0000	5.0000	2.0000	3.0000
C56	1.0000	5.0000	3.0000	5.0000
C57	1.0000	5.0000	2.0000	4.0000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'M' = 2.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	116	2.4224	2.0000	2.3750	0.9784	0.0901
C49	116	2.819	3.000	2.798	1.184	0.110
C50	116	2.3879	2.0000	2.3565	0.9580	0.0889
C51	116	1.2845	1.0000	1.1635	0.7078	0.0657
C52	116	2.5086	2.0000	2.4615	0.9371	0.0870
C53	116	3.362	3.000	3.484	1.122	0.104
C54	116	2.9483	3.0000	2.9192	1.0491	0.0974
C55	116	2.431	2.000	2.365	1.129	0.105
C56	116	3.517	4.000	3.577	1.219	0.113
C57	116	2.589	2.000	2.452	1.083	0.101

	MIN	MAX	Q1	Q3
C40	1.0000	5.0000	2.0000	3.0000
C49	1.000	5.000	2.000	4.000
C50	1.0000	5.0000	2.0000	3.0000
C51	1.0000	5.0000	1.0000	1.0000
C52	1.0000	5.0000	2.0000	3.0000
C53	1.000	5.000	3.000	4.000
C54	1.0000	5.0000	2.0000	3.0000
C55	1.000	5.000	2.000	3.000
C56	1.000	5.000	3.000	5.000
C57	1.000	5.000	2.000	3.000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' = 1.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	421	2.7221	3.0000	2.6913	0.9982	0.0486
C49	421	3.0190	3.0000	3.0211	1.1648	0.0568
C50	421	2.5131	2.0000	2.4802	0.9681	0.0472
C51	421	1.5344	1.0000	1.4381	0.8484	0.0413
C52	421	2.7957	3.0000	2.7751	0.9933	0.0484
C53	421	3.6413	4.0000	3.7045	1.1007	0.0536
C54	421	2.7055	3.0000	2.6728	1.0970	0.0535
C55	421	2.5748	3.0000	2.5277	1.0678	0.0520
C56	421	3.0171	4.0000	3.0076	1.1474	0.0559
C57	421	2.9002	3.0000	2.8892	1.1125	0.0542

	MIN	MAX	Q1	Q3
C40	1.0000	5.0000	2.0000	3.0000
C49	1.0000	5.0000	2.0000	4.0000
C50	1.0000	5.0000	2.0000	3.0000
C51	1.0000	5.0000	1.0000	2.0000
C52	1.0000	5.0000	2.0000	3.0000
C53	0.0000	5.0000	3.0000	5.0000
C54	1.0000	5.0000	2.0000	3.0000
C55	1.0000	5.0000	2.0000	3.0000
C56	1.0000	5.0000	2.0000	5.0000
C57	1.0000	5.0000	2.0000	4.0000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' =2.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	40	2.850	3.000	2.833	0.864	0.137
C49	40	3.275	3.000	3.278	1.189	0.175
C50	40	2.530	2.000	2.444	0.934	0.148
C51	40	1.675	1.000	1.528	1.095	0.171
C52	40	2.900	3.000	2.833	0.841	0.133
C53	40	3.925	4.000	4.000	1.067	0.166
C54	40	2.700	3.000	2.667	1.114	0.176
C55	40	2.425	2.000	2.361	1.174	0.186
C56	40	3.975	4.000	4.028	1.000	0.158
C57	40	3.175	3.000	3.139	1.010	0.160

	MIN	MAX	Q1	Q3
C40	1.000	5.000	2.000	3.000
C49	1.000	5.000	2.000	4.000
C50	1.000	5.000	2.000	3.000
C51	1.000	5.000	1.000	2.000
C52	2.000	5.000	2.000	3.000
C53	1.000	5.000	3.000	5.000
C54	1.000	5.000	2.000	3.000
C55	1.000	5.000	1.250	3.000
C56	2.000	5.000	3.000	5.000
C57	2.000	5.000	2.000	4.000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' = 3.
MTB > desc c40-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C40	17	3.000	3.000	2.933	1.000	0.243
C49	17	3.529	4.000	3.600	1.201	0.311
C50	17	2.647	3.000	2.667	0.786	0.191
C51	17	1.824	2.000	1.800	0.883	0.214
C52	17	3.059	3.000	3.000	1.029	0.250
C53	17	4.118	4.000	4.133	0.781	0.189
C54	17	2.882	3.000	2.867	1.054	0.256
C55	17	2.824	3.000	2.867	0.883	0.214
C56	17	4.176	4.000	4.200	0.809	0.196
C57	17	3.118	3.000	3.067	0.993	0.241

	MIN	MAX	Q1	Q3
C40	2.000	5.000	2.000	3.500
C49	1.000	5.000	2.000	4.500
C50	1.000	4.000	2.000	3.000
C51	1.000	3.000	1.000	3.000
C52	2.000	5.000	2.000	3.000
C53	3.000	5.000	3.500	5.000
C54	1.000	5.000	2.000	5.500
C55	1.000	4.000	2.000	3.500
C56	3.000	5.000	5.500	5.000
C57	2.000	5.000	2.000	4.000

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' = 6.
MTB > desc c40-c57

             N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40         19   2.421    2.000    2.353    0.961    0.221
C49         19   2.789    3.000    2.765    1.032    0.237
C50         19   2.158    2.000    2.176    0.765    0.175
C51         19   1.526    1.000    1.412    0.905    0.208
C52         19   2.526    3.000    2.529    0.772    0.177
C53         19   3.421    3.000    3.412    1.017    0.233
C54         19   2.579    2.000    2.588    1.071    0.246
C55         19   2.158    2.000    2.118    0.958    0.220
C56         19   2.789    4.000    2.824    0.976    0.224
C57         19   2.579    2.000    2.588    1.071    0.246

             MIN      MAX       Q1       Q3
C40        1.000    5.000    2.000    3.000
C49        1.000    5.000    2.000    3.000
C50        1.000    3.000    2.000    3.000
C51        1.000    4.000    1.000    2.000
C52        1.000    4.000    2.000    3.000
C53        2.000    5.000    3.000    4.000
C54        1.000    4.000    2.000    4.000
C55        1.000    4.000    1.000    3.000
C56        2.000    5.000    3.000    4.000
C57        1.000    4.000    2.000    4.000

MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' = 5.
MTB > desc c40-c57

             N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40         52   2.538    2.000    2.500    0.979    0.136
C49         52   3.058    3.000    3.065    1.074    0.149
C50         52   2.192    2.000    2.152    0.817    0.113
C51         52   1.404    1.000    1.281    0.776    0.107
C52         52   2.596    2.500    2.541    1.015    0.141
C53         52   3.192    3.000    3.174    0.991    0.137
C54         52   2.423    2.000    2.348    1.073    0.149
C55         52   2.250    2.000    2.152    1.027    0.142
C56         52   4.019    4.000    4.109    1.019    0.141
C57         52   2.750    3.000    2.739    1.064    0.148

             MIN      MAX       Q1       Q3
C40        1.000    5.000    2.000    3.000
C49        1.000    5.000    2.000    4.000
C50        1.000    4.000    2.000    3.000
C51        1.000    4.000    1.000    2.000
C52        1.000    5.000    2.000    3.000
C53        1.000    5.000    2.000    4.000
C54        1.000    5.000    2.000    5.000
C55        1.000    5.000    1.250    3.000
C56        1.000    5.000    3.000    5.000
C57        1.000    5.000    2.000    4.000

MTB > copy c6-c15 c40-c57;
SUBC> use 'Br' = 5.
MTB > desc c40-c57

             N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40         52   2.538    2.000    2.500    0.979    0.136
C49         52   3.058    3.000    3.065    1.074    0.149
C50         52   2.192    2.000    2.152    0.817    0.113
C51         52   1.404    1.000    1.281    0.776    0.107
C52         52   2.596    2.500    2.541    1.015    0.141
C53         52   3.192    3.000    3.174    0.991    0.137
C54         52   2.423    2.000    2.348    1.073    0.149
C55         52   2.250    2.000    2.152    1.027    0.142
C56         52   4.019    4.000    4.109    1.019    0.141
C57         52   2.750    3.000    2.739    1.064    0.148

             MIN      MAX       Q1       Q3
C40        1.000    5.000    2.000    3.000
C49        1.000    5.000    2.000    4.000
C50        1.000    4.000    2.000    3.000
C51        1.000    4.000    1.000    2.000
C52        1.000    5.000    2.000    3.000
C53        1.000    5.000    2.000    4.000
C54        1.000    5.000    2.000    5.000
C55        1.000    5.000    1.250    3.000
C56        1.000    5.000    3.000    5.000
C57        1.000    5.000    2.000    4.000
```

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'YOS' = 1-5.
* ERROR * Use ERASE to DELETE or OMIT all rows in a column

MTB > use 'YOS' = 1.
* ERROR * Name not found in dictionary


MTB > copy c6-c15 c40-c57;
SUBC> use 'YOS' = 6-10.
MTB > desc c40-c57

          N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40      75   2.648    2.000    2.597    0.956    0.110
C49      75   2.920    3.000    2.925    1.024    0.118
C50      75   2.3333   2.0000   2.3134   0.9486   0.0974
C51      75   1.573    1.000    1.463    0.981    0.104
C52      75   2.760    3.000    2.731    0.990    0.218
C53      75   5.533    4.000    3.582    1.944    0.121
C54      75   2.721    3.000    2.701    1.302    0.125
C55      75   2.653    3.000    2.612    1.189    0.136
C56      75   2.773    4.000    2.851    1.071    0.124
C57      75   2.867    3.000    2.831    1.143    0.132

          MIN     MAX      Q1      Q3
C40     1.000   5.000   2.000   3.000
C49     1.000   5.000   2.000   4.000
C50     1.0000  4.0000  2.0000  3.0000
C51     1.000   5.000   1.000   2.000
C52     1.000   5.000   2.000   3.000
C53     1.000   5.000   3.000   4.000
C54     1.000   5.000   2.000   3.000
C55     1.000   5.000   2.000   3.000
C56     1.000   5.000   3.000   5.000
C57     1.000   5.000   2.000   4.000

MTB > copy c6-c15 c40-c57;
SUBC> use 'YOS' = 1-5.
* ERROR * Use ERASE to DELETE or OMIT all rows in a column
```

```
MTB > copy c6-c15 c40-c57;
SUBC> use 'YOS' = 11-15.
MTB > desc c40-c57

          N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40      46   2.630    3.000    2.619    0.875    0.130
C49      46   3.000    3.000    3.000    1.176    0.173
C50      46   2.217    2.000    2.190    0.936    0.138
C51      46   1.717    1.000    1.595    1.140    0.169
C52      46   2.807    2.000    2.671    0.953    0.140
C53      46   5.783    4.000    5.810    1.892    0.155
C54      46   2.630    3.000    2.595    0.976    0.144
C55      46   2.435    2.000    2.405    0.868    0.127
C56      46   2.739    4.000    5.810    1.237    0.382
C57      46   2.804    3.000    2.786    1.128    0.166

          MIN     MAX      Q1      Q3
C40     1.000   5.000   2.000   3.000
C49     1.000   5.000   2.000   4.000
C50     1.000   4.000   2.000   3.000
C51     1.000   5.000   1.000   2.000
C52     1.000   5.000   2.000   3.000
C53     2.000   5.000   3.000   5.000
C54     1.000   5.000   2.000   3.000
C55     1.000   5.000   2.000   3.000
C56     1.000   5.000   3.000   5.000
C57     1.000   5.000   2.000   4.000

MTB > copy c6-c15 c40-c57;
SUBC> use 'YOS' = 16-20.
MTB > desc c40-c57

          N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C40      12   2.500    2.500    2.500    0.522    0.151
C49      12   3.333    3.500    3.400    1.073    0.310
C50      12   2.500    3.000    2.500    1.087    0.314
C51      12   1.583    1.500    1.500    0.669    0.193
C52      12   2.667    2.500    2.600    0.778    0.225
C53      12   5.417    5.000    5.400    1.164    0.336
C54      12   5.000    5.000    5.000    1.044    0.302
C55      12   2.917    3.000    2.900    1.311    0.379
C56      12   4.167    4.500    4.300    1.030    0.297
C57      12   5.167    5.000    5.100    1.115    0.322
```

	MIN	MAX	Q1	Q3
C48	2.000	5.000	2.000	3.000
C49	1.000	5.000	2.000	4.000
C50	1.000	4.000	1.250	3.000
C51	1.000	5.000	1.000	2.000
C52	2.000	4.000	2.000	3.000
C53	2.000	5.000	2.250	4.750
C54	1.000	5.000	2.250	3.750
C55	1.000	5.000	2.000	3.750
C56	2.000	5.000	3.250	5.000
C57	2.000	5.000	2.000	4.000

```
MTB > copy c4-c15 c48-c57;
SUBC> use 'YOS' < 6.
MTB > desc c48-c57
```

	N	MEAN	MEDIAN	TRMEAN	STDEV	SEMEAN
C48	75	2.640	2.000	2.597	0.954	0.110
C49	75	2.920	3.000	2.925	1.024	0.118
C50	75	2.3333	2.0000	2.3194	0.8426	0.0974
C51	75	1.573	1.000	1.463	0.901	0.104
C52	75	2.760	3.000	2.731	0.998	0.115
C53	75	3.533	4.000	3.502	1.044	0.121
C54	75	2.733	3.000	2.701	1.082	0.125
C55	75	2.653	3.000	2.612	1.100	0.136
C56	75	3.773	4.000	3.851	1.073	0.124
C57	75	2.867	3.000	2.851	1.143	0.132

	MIN	MAX	Q1	Q3
C48	1.000	5.000	2.000	3.000
C49	1.000	5.000	2.000	4.000
C50	1.0000	4.0000	2.0000	3.0000
C51	1.000	5.000	1.000	2.000
C52	1.000	5.000	2.000	3.000
C53	1.000	5.000	3.000	4.000
C54	1.000	5.000	2.000	3.000
C55	1.000	5.000	2.000	3.000
C56	1.000	5.000	3.000	5.000
C57	1.000	5.000	2.000	4.000

```
MTB > table 'Monthly' 'Mcomv'

ROWS: Monthly     COLUMNS: Mcomv

          1       2     ALL

  1       0     325     325
  2     126      98     224
 ALL    126     423     949

 CELL CONTENTS —
              COUNT

MTB > table 'monthly' 'mlocal'

ROWS: Monthly     COLUMNS: Mlocal

          1       2     ALL

  1       0     325     325
  2     115     109     224
 ALL    115     434     949

 CELL CONTENTS —
              COUNT

MTB > table 'monthly' 'mcost'

ROWS: Monthly     COLUMNS: Mcost

          1       2     ALL

  1       0     325     325
  2     197      27     224
 ALL    197     352     949

 CELL CONTENTS —
              COUNT
```

```
MTB > table 'wantciv' 'mprof'

ROWS: Wantciv     COLUMNS: Mprof

              1        2      ALL

1             1      324      325
2            50      174      224
ALL          51      498      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'mflex'

ROWS: Wantciv     COLUMNS: Mflex

              1        2      ALL

1             1      324      325
2             2      222      224
ALL           3      546      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'msec'

ROWS: Wantciv     COLUMNS: Msec

              1        2      ALL

1             0      325      325
2            14      210      224
ALL          14      535      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'mconf'

ROWS: Wantciv     COLUMNS: Mconf

              1        2      ALL

1             0      325      325
2            13      211      224
ALL          13      536      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'meco'

ROWS: Wantciv     COLUMNS: Meco

              1        2      ALL

1             0      325      325
2            27      197      224
ALL          27      522      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'cconv'

ROWS: Wantciv     COLUMNS: Cconv

              1        2      ALL

1           152      173      325
2             0      224      224
ALL         152      397      549

CELL CONTENTS --
                    COUNT
```

```
MTB > table 'wantciv' 'clocal'
```

ROWS: Wantciv COLUMNS: Clocal

	1	2	ALL
1	67	258	325
2	0	224	224
ALL	67	482	549

CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'ccost'
```

ROWS: Wantciv COLUMNS: Ccost

	1	2	ALL
1	9	316	325
2	0	224	224
ALL	9	540	549

CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'cpref'
```

ROWS: Wantciv COLUMNS: Cpref

	1	2	ALL
1	248	77	325
2	0	224	224
ALL	248	301	549

CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'cflex'
```

ROWS: Wantciv COLUMNS: Cflex

	1	2	ALL
1	248	77	325
2	0	224	224
ALL	248	301	549

CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'csec'
```

ROWS: Wantciv COLUMNS: Csec

	1	2	ALL
1	15	310	325
2	0	224	224
ALL	15	534	549

CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'cconf'
```

ROWS: Wantciv COLUMNS: Cconf

	1	2	ALL
1	25	300	325
2	0	224	224
ALL	25	524	549

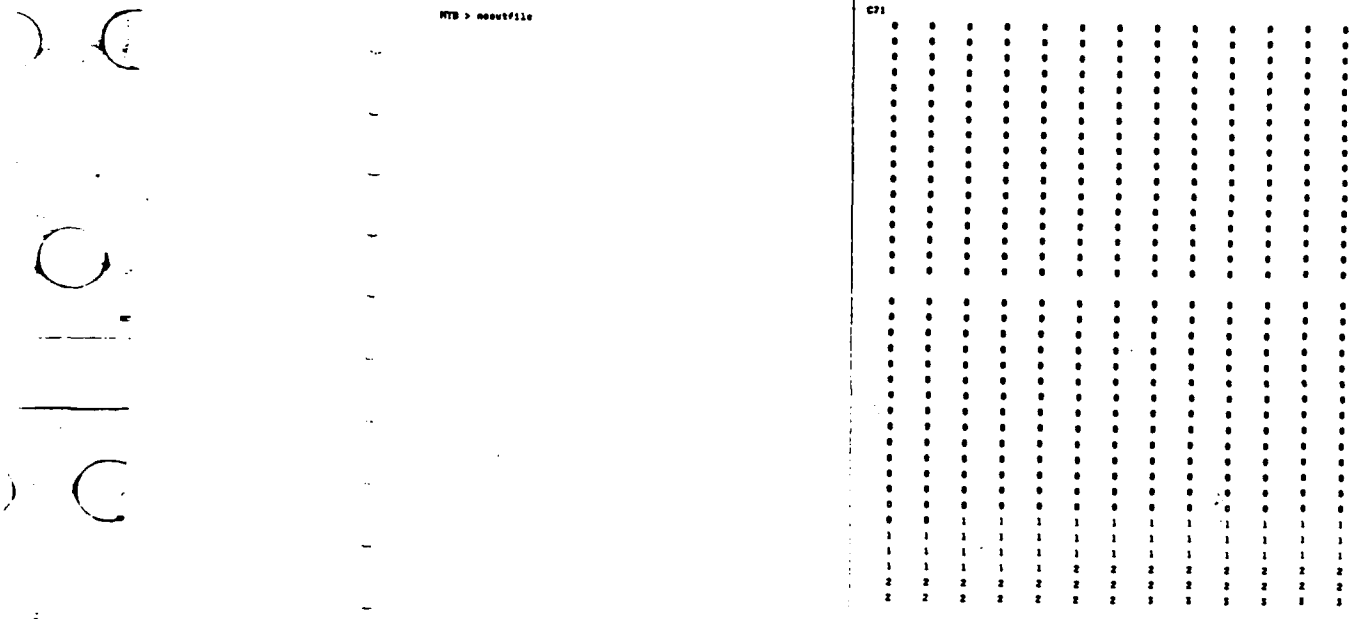
CELL CONTENTS --
COUNT

```
MTB > table 'wantciv' 'cconf'

ROWS: Wantciv     COLUMNS: Cconf

              1        2      ALL

1            25      300      325
2             0      224      224
ALL          25      524      549

CELL CONTENTS --
                    COUNT

MTB > table 'wantciv' 'ceco'

ROWS: Wantciv     COLUMNS: Ceco

              1        2      ALL

1           227       98      325
2             0      224      224
ALL         227      322      549

CELL CONTENTS --
                    COUNT

MTB > table 'ins'

ROWS: Ins

          COUNT

1            61
2           487
3             1
ALL         549

MTB > table 'wantins'

ROWS: Wantins

          COUNT

1           461
2            88
ALL         549

MTB > desc 'civcost'

               N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
Civcost      549      88.0       0.0      19.7     689.8      29.4

               MIN       MAX        Q1        Q3
Civcost        0.0   15000.0       0.0       0.0

MTB > copy 'civcost' c60
MTB > sort c60
* ERROR * 1 is an illegal number of arguments

MTB > sort c60 c61
MTB > delet 1:444 c61
MTB > desc c61

               N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C61          105       460       160       244      1528       149

               MIN       MAX        Q1        Q3
C61              6     15000        70       400

MTB > desc 'prem'

               N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
Prem         549     39.75     25.00     36.62     37.53      1.60

               MIN       MAX        Q1        Q3
Prem          0.00    250.00      0.00     50.00
```

```
MTB > copy 'prem' c65
MTB > sort c65 c66
MTB > delete 1:137 c66
MTB > desc c66

               N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C66          412    52.97    50.00    49.26    34.29     1.69

               MIN      MAX       Q1       Q3
C66           0.00   250.00    25.00    50.00

MTB > table 'prem' 'wantins'


 ROWS: Prem     COLUMNS: Wantins

              1        2      ALL

  0          88       50      138
 25         138       17      155
 50         160       13      173
100          62        5       67
150          11        3       14
250           2        0        2
ALL         461       88      549

 CELL CONTENTS —
                  COUNT

MTB > nooutfile
```

```
MTB > copy 'prem' c65
MTB > sort c65 c66
MTB > delete 1:130 c66
MTB > desc c66

               N     MEAN   MEDIAN   TRMEAN    STDEV   SEMEAN
C66          411    53.10    50.00    49.82    34.23     1.69

               MIN      MAX       Q1       Q3
C66          25.00   250.00    25.00    50.00

MTB > nooutfile
```

```
MTB > copy c18 c70
MTB > sort c70
* ERROR * 1 is an illegal number of arguments

MTB > rank c70
* ERROR * 1.4s too few arguments

MTB > sort c70 c71
MTB > print c71

C71
```



```
MTB > delete 1:197 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            352     1.776     0.000     0.938     4.965     0.265

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            351     1.781     0.000     0.933     4.971     0.265

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            350     1.786     0.000     0.936     4.978     0.266

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            349     1.791     0.000     0.959     4.984     0.267

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            348     1.796     0.000     0.962     4.990     0.267

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000
```

```
MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            347     1.801     0.000     0.965     4.996     0.268

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > delete 1 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            346     1.806     0.000     0.968     5.003     0.269

               MIN       MAX        Q1        Q3
C71          0.000    60.000     0.000     2.000

MTB > print c71

C71
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   0   0   0   0   0   0
   0   0   0   0   0   0   0   1   1   1   1   1   1
MTB > delete 1:215 c71
MTB > desc c71

                 N      MEAN    MEDIAN    TRMEAN     STDEV    SEMEAN
C71            131     4.771     2.000     3.607     7.222     0.631

               MIN       MAX        Q1        Q3
C71          1.000    60.000     1.000     5.000
```

```
MTB > table 'civlocal'

ROWS: Civlocal

        COUNT

1         26
2        523
ALL      549

MTB > table 'civsec'

ROWS: Civsec

        COUNT

1         94
2        455
ALL      549

MTB > table 'civpriv'

ROWS: Civpriv

        COUNT

1         13
2        536
ALL      549
```

```
MTB > table 'civrep'

ROWS: Civrep

        COUNT

1         46
2        503
ALL      549

MTB > nooutfile
```

```
MTB > copy c1 c75
MTB > sort c75 c76
MTB > print c76

C76
```

4	4	4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4	4	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	4	6	6	6
6	6	6	6	6	6	6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	6	6	6	6	6	6	6
6	6	6	6	6	6	6	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7	7	7	7	7	7
7	7	8	8	8	8	8	8	8	8	8	8	8	8
8	8	8	8	8	8	8	8	8	8	8	8	8	8
8	8	8	8	8	8	8	8	8	8	8	8	8	8
8	8	8	8	8	8	8	8	8	8	8	8	8	8
8	8	8	8	8	8	8	8	8	8	8	8	8	8
8	8	9	9	9	9	9	9	9	9	9	9	9	9
9	9	9	9	9	9	9	9	9	9	9	9	9	9
9	9	9	9	9	9	9	9	9	9	9	9	9	9
9	9	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	10	10	10
10	10	10	10	10	10	10	10	10	10	10	11	11	11
11	11	11	11	11	11	11	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11	11	11	11	11	11	11
11	11	11	11	12	12	12	12	12	12	12	12	12	12
12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	13	13	13	13	13	13	13	13	13	13	13	13	13
13	13	13	13	13	13	13	13	13	13	13	13	13	14
14	14	14	14	14	14	14	14	14	14	14	14	14	14

14	14	14	14	14	14	14	15	15	15	15
15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	17
17	17	17	17	17	17	17	18	18	18	18
18	18	18	18	18	19	19	19	20	20	20
23	23	24								

```
MTB > stop
*** Minitab Release 7.1 *** Minitab, Inc. ***
IBM VM/CMS. Storage available 259516
```

```
MTB > table 'wantciv'

ROWS: Wantciv

       COUNT

  1      325
  2      224
 ALL     549

MTB > noutfile
```

APPENDIX D

GLOSSARY

CHAMPUS - Civilian Health and Medical Program of the Uniformed Services.

DEERS - Defense Enrollment and Eligibility Reporting System. This data base is an automated system which contains information on DoD beneficiaries who have enrolled and includes their address, birthdate, sponsor status, and sex. One purpose of DEERS is to verify the eligibility for health care benefits in the direct care facilities and through CHAMPUS.

Direct care system - The network of military medical facilities available for providing health care to MHSS beneficiaries. These include Military Treatment Facilities, which are hospitals and clinics.

DoD - Department of Defense.

FEHB - Federal Employee Health Benefits.

FEHBP - Federal Employee Health Benefits Program.

FY - fiscal year. The federal government's fiscal year runs from October 1 through September 30.

HA - Health Affairs, part of the Office of the Assistant Secretary of Defense.

HMO - Health Maintenance Organization. An HMO is an organization which contracts with specific health care providers for the provision of care for its enrollees and also acts as an insurer, providing care to enrollees on a prepaid fixed-amount basis. The concept behind the HMO is that the enrollees' reduced freedom of choice of providers is offset by a reduction in insurance costs, with the cost-containing responsibility placed on the providers.

MHSS - Military Health Service System. The MHSS incorporates the direct care system, CHAMPUS, and the administration supporting each of these.

MHSUS - Military Health Services Utilization Survey.

MTF - Military Treatment Facility, a military hospital or clinic.

Readiness - Readiness refers to the condition of adequate military preparedness in case of war.

Survivors - Dependents of deceased active duty or retired members of the Uniformed Services.

Uniformed Services - Refers to the armed forces. Active and retired members of the uniformed services and their dependents are eligible for care within the MHSS.

Utilization - Refers to the level of use of health care services by an individual or a population, often measured in hospital admissions, hospital days, and outpatient visits on a per capita basis.

LIST OF REFERENCES

1. Department of Defense, *Review of the Military Health Benefit, Volume 1*, pp. 3-16, Government Printing Office, Washington, D.C., 1989.

2. Department of Defense, *Review of the Military Health Benefit, Volume II*, p. ix, Government Printing Office, Washington, D.C., 1989.

3. Schumaker, LTC C.J., *Military Health Benefit: Study Plan*, The Office of the Secretary of Defense (Health Affairs), 1979.

4. Congressional Budget Office, *Options for Change in Military Medical Care*, p. 41, Congress of the United States, Washington, D.C., 1984.

5. *Alternative Medical Benefit Programs Available to DOD*, Coopers & Lybrand, Washington, D.C., 1978.

6. Rice, Donald B., *Defense Resource Management Study Final Report*, commissioned by the Secretary of Defense, Washington, D.C., 1979.

7. Congressional Budget Office, *Reforming the Military Health Care System*, Congress of the United States, Washington, D.C., 1988.

8. Grace, Peter J., *President's Private Sector Survey on Cost Control*, a study commissioned by Executive Order 12369, Washington, D.C., 1983.

9. *Health Care in the Military: Feasibility and Desirability of a Health Enrollment System*, Rand Corporation, 1984.

10. *Study of the Federal Employees Health Benefits Program*, Towers, Perrin, Forster, and Crobsy, Inc., 1988.

11. *A Statistical Analysis of Selected Portions of the Military Health Services Utilization Survey: 1978. Volume III. Analysis of Responses from Active Duty Personnel and Dependents of Active Duty Personnel*, p. 78, Presearch, Inc., 1980.

12. Office of the Assistant Secretary of Defense (Health Affairs), *Project Imprint, The Military Health Benefit Package*, Washington, D.C., 1985.

13. Office of the Assistant Secretary of Defense (Health Affairs), *Feasibility, Advisability and Impact of Converting Champus to a Contributory System or Replacing it with FEHB Services*, p. 11, Government Printing Office, Washington, D.C., 1976.

BIBLIOGRAPHY

Congressional Budget Office, *Physican Reimbursement Under Medicare: Options for Change*, Congress of the United States, Washington, D.C., 1986.

Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, Congress of the United States, Washington, D.C., 1990.

Davis, Karen, *National Health Insurance: Benefits, Costs and Consequences*, The Brookings Institute, 1975.

Harrington, Geri, *The Health Insurance Fact & Answer Book*, Harper & Row, 1985.

Lindsay, Cotton M., ed, *New Directions in Public Health Care: A Prescription for the 1980s*, Transaction Books, 1980.

Marmor, Theodore R., *Political Analysis and American Medical Care*, Cambridge University Press, 1983.

Meyer, Jack A., ed, *Market Reforms in Health Care: Current Issues, New Directions, Strategic Decisions*, American Enterprise Institute for Public Policy Research, 1983.

Meyer, Jack A., Johnson, William R., and Sullivan, Sean, *Passing the Health Care Buck: Who Pays the Hidden Cost?*, American Enterprise Institute for Public Policy Research, 1983.

Office of the Assistant Secretary of Defense (Health Affairs), *Satisfaction with Health Services: Military Beneficiaries*, Government Printing Office, Washington, D.C., 1979.

A Statistical Analysis of Selected Portions of the Military Health Services Utilization Survey: 1978. Volume II. Analysis of Responses from Retired Personnel, Dependents of Retired Personnel, and Survivors of Deceased Personnel, Presearch, Inc., 1980.

Terasawa, Katsuaki, and Whipple, David, *On the Comparative Costing of Military vs Civilian Modes of Health Care Delivery*, Naval Postgraduate School, Monterey, California, 1975.

United States Congress, House, Committee on Armed Services, *National Defense Authorization Act for Fiscal Years 1990-1991*, 101st Congress, 1st session, 1989.

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